

# NACOmatic

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|     |    |    |     |    |    |
|-----|----|----|-----|----|----|
| 02C | => | 30 | HYR | => | 42 |
| 11Y | => | 32 | ISW | => | 79 |
| 30W | => | 58 | JVL | => | 43 |
| 3CU | => | 31 | LNL | => | 47 |
| 40D | => | 72 | LNR | => | 48 |
| 44C | => | 29 | LSE | => | 45 |
| 49C | => | 31 | LUM | => | 52 |
| 57C | => | 36 | MDZ | => | 51 |
| 58C | => | 37 | MFI | => | 51 |
| 60C | => | 37 | MKE | => | 53 |
| 61C | => | 38 | MRJ | => | 54 |
| 62C | => | 39 | MSN | => | 49 |
| 63C | => | 39 | MTW | => | 50 |
| 64C | => | 39 | MWC | => | 54 |
| 68C | => | 42 | OCQ | => | 58 |
| 73C | => | 47 | OEO | => | 59 |
| 79C | => | 56 | OLG | => | 69 |
| 82C | => | 57 | OSH | => | 60 |
| 87Y | => | 49 | OVS | => | 29 |
| 88C | => | 60 | PBH | => | 61 |
| 91C | => | 63 | PCZ | => | 76 |
| 92C | => | 63 | PDC | => | 62 |
| 93C | => | 66 | PKF | => | 61 |
| 94C | => | 66 | PVB | => | 62 |
| 96C | => | 66 | RAC | => | 64 |
| 99C | => | 71 | RCX | => | 46 |
| AHH | => | 26 | RHI | => | 65 |
| AIG | => | 26 | RNH | => | 58 |
| ARV | => | 55 | RPD | => | 65 |
| ASX | => | 28 | RRL | => | 52 |
| ATW | => | 27 | RYV | => | 75 |
| AUW | => | 76 | RZN | => | 69 |
| BCK | => | 29 | SBM | => | 67 |
| BDJ | => | 29 | SSQ | => | 68 |
| BUU | => | 31 | STE | => | 70 |
| CLI | => | 33 | SUE | => | 71 |
| CMY | => | 70 | SUW | => | 71 |
| CWA | => | 56 | TKV | => | 73 |
| DAF | => | 56 | UBE | => | 34 |
| DLL | => | 28 | UES | => | 75 |
| EAU | => | 37 | UNU | => | 44 |
| EFT | => | 55 | VIQ | => | 57 |
| EGV | => | 36 | VOK | => | 74 |
| ENW | => | 44 |     |    |    |
| ETB | => | 77 |     |    |    |
| EZS | => | 67 |     |    |    |
| FLD | => | 38 |     |    |    |
| GRB | => | 41 |     |    |    |
| GTG | => | 40 |     |    |    |
| HBW | => | 42 |     |    |    |
| HXF | => | 41 |     |    |    |

## GENERAL INFORMATION

This Airport/Facility Directory is a Civil Flight Information Publication published and distributed every eight weeks by the National Aeronautical Charting Office, FAA, Department of Transportation, Silver Spring, Maryland 20910. It is designed for use with Aeronautical Charts covering the conterminous United States, Puerto Rico and the Virgin Islands.

This directory contains all open to the public airports, seaplane bases and heliports, military facilities, and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally, this directory contains communications data, navigational facilities and certain special notices and procedures.

Military data contained within this publication is provided by the National Geospatial-Intelligence Agency and is intended to provide reference data for military and/or joint civil/military airports. Not all military data contained in this publication is applicable to civil users.

## CORRECTIONS, COMMENTS, AND/OR PROCUREMENT

**CRITICAL** information such as equipment malfunction, abnormal field conditions, hazards to flight, etc., should be reported as soon as possible to the nearest FAA facility, either in person or by reverse charge telephone call.

**FOR AIRPORT SUPPLEMENT REVISIONS FORM VISIT WEB SITE:** <http://nfdc.faa.gov/portal/airportchanges.do>

FAA, Aeronautical Information Services, ATO-R, Rm. 626  
800 Independence Ave., SW  
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NOTICE: Changes must be received by the Aeronautical Information Services as soon as possible but not later than the "cut-off" dates listed below to assure publication on the desired effective date.

| Effective Date | Airport Information<br>Cut-off date | Airspace Information*<br>Cut-off date |
|----------------|-------------------------------------|---------------------------------------|
| 22 Oct 09      | 9 Sep 09                            | 20 Aug 09                             |
| 17 Dec 09      | 4 Nov 09                            | 15 Oct 09                             |
| 11 Feb 10      | 30 Dec 09                           | 10 Dec 09                             |
| 8 Apr 10       | 24 Feb 10                           | 4 Feb 10                              |
| 3 Jun 10       | 21 Apr 10                           | 1 Apr 10                              |
| 29 Jul 10      | 16 Jun 10                           | 27 May 10                             |

\*Including changes to preferred routes and graphic depictions on charts.

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Frequently asked questions (FAQs) are answered on our web site at [www.naco.faa.gov](http://www.naco.faa.gov).  
See the FAQs prior to contact via toll free number.

**FOR PROCUREMENT CONTACT:**

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or any authorized FAA Chart Agent

**New or Changed Information**—To alert users of new information or changes to information from the previous issue, a vertical line will be portrayed in the outside margin and extending the full length of the new and/or revised data. This will not apply to the front cover or the airport/facility directory listing.

This Airport/Facility Directory comprises part of the following sections of the United States Aeronautical Information Publication (AIP): GEN, ENR and AD.



## TABLE OF CONTENTS

|   |                    |
|---|--------------------|
| General Information.....  | Inside Front Cover |
| Abbreviations .....   | 2                  |
| Directory Legend .....  | 4                  |
| Airport/Facility Directory .....                                  |                    |
| Illinois .....  | 22                 |
| Indiana .....   | 81                 |
| Michigan .....  | 129                |
| Ohio .....  | 213                |
| Wisconsin .....   | 276                |
| City/Military Airport Cross Reference .....                       | 330                |
| Seaplane Landing Areas .....                                      | 331                |
| Special Notices.....  | 332                |
| Regulatory Notices .....  | 340                |
| FAA and National Weather Service .....                            |                    |
| Telephone Numbers .....   | 341                |
| Key to Aviation Weather Reports .....                             | 342                |
| Air Traffic Facilities Telephone Numbers .....                    | 344                |
| Air Route Traffic Control Centers .....                           | 346                |
| Flight Service Station Communication Frequencies .....            | 348                |
| Flight Standards District Offices.....                            | 351                |
| Routes/Waypoints .....  |                    |
| Low Altitude Preferred Routes.....                                | 352                |
| Low Altitude Directional Routes .....                             | 355                |
| High Altitude Preferred Routes.....                               | 356                |
| High Altitude Directional Routes .....                            | 374                |
| Q-Routes.....   | 377                |
| RNAV Routing Pitch and Catch Points .....                         | 380                |
| VFR Waypoints.....  | 391                |
| VOR Receiver Check .....  | 399                |
| Parachute Jumping Areas .....                                     | 403                |
| Aeronautical Chart Bulletins .....                                | 405                |
| Supplemental Communication Reference .....                        | 417                |
| Airport Diagrams .....  | 424                |
| National Weather Service (NWS) Upper Air Observing Stations ..... | 504                |
| Enroute Flight Advisory Service (EFAS) .....                      | Inside Back Cover  |

## ABBREVIATIONS

The following abbreviations/acronyms are those commonly used within this Directory. Other abbreviations/acronyms may be found in the Legend and are not duplicated below. The abbreviations presented are intended to represent grammatical variations of the basic form. (Example—"req" may mean "request", "requesting", "requested", or "requests").

|        |   |       |                                       |
|--------|---|-------|---------------------------------------|
| AAF    | Army Air Field  | byd   | beyond                                |
| AB     | Airbase   | C     | Commercial Circuit (Telephone)        |
| abv    | above   | CGAF  | Coast Guard Air Facility              |
| ACC    | Air Combat Command; Area Control Center               | CGAS  | Coast Guard Air Station               |
| acft   | aircraft  | CIV   | Civil                                 |
| ADCC   | Air Defense Control Center                            | clsd  | closed                                |
| AER    | approach end rwy                                      | comd  | command                               |
| AFB    | Air Force Base  | CONUS | Continental United States             |
| AFHP   | Air Force Heliport                                    | CSTMS | Customs                               |
| afld   | airfield  | ctc   | contact                               |
| AFOD   | US Army Flight Operations Detachment                  | ctl   | control                               |
| AFRC   | Armed Forces Reserve Center/Air Force Reserve Command | dalgt | daylight                              |
| AFSS   | Automated Flight Service Station                      | Dec   | December                              |
| AG     | Agriculture   | DIAP  | DoD Instrument Approach Procedure     |
| A-GEAR | Arresting Gear  | DoD   | Department of Defense                 |
| AGL    | above ground level                                    | DSN   | Defense Switching Network (Telephone) |
| AHP    | Army heliport   | dspld | displaced                             |
| ALS    | Approach Light System                                 | durn  | duration                              |
| alt    | altitude  | eff   | effective                             |
| AMC    | Air Mobility Command                                  | emerg | emergency                             |
| ANGS   | Air National Guard Station                            | EOR   | End of Runway                         |
| apch   | approach  | ETA   | Estimated Time of Arrival             |
| Apr    | April   | ETD   | Estimated Time of Departure           |
| APU    | Auxiliary Power Unit                                  | exc   | except                                |
| ARB    | Air Reserve Base                                      | extd  | extend                                |
| arpt   | airport   | FBO   | fixed-base operator                   |
| ARS    | Air Reserve Station                                   | Feb   | February                              |
| AS     | Air Station   | fld   | field                                 |
| ASDE-X | Airport Surface Detection Equipment—Model X           | FLIP  | Flight Information Publication        |
| ASU    | Aircraft Starting Unit                                | flt   | flight                                |
| ATC    | Air Traffic Control                                   | flw   | follow                                |
| Aug    | August  | Fri   | Friday                                |
| AUW    | All Up Weight (gross weight)                          | FSS   | Flight Service Station                |
| avbl   | available   | GA    | glide angle                           |
| bcn    | beacon  | GCA   | Ground Controlled Approach            |
| blo    | below   | GS    | glide slope                           |
|        |   | haz   | hazard                                |
|        |   | HQ    | Headquarters                          |

CONTINUED ON NEXT PAGE

## CONTINUED FROM PRECEDING PAGE

|        |   |          |   |
|--------|---|----------|---|
| hr     | hour                                      | npi      | non precision instrument                                |
| IAP    | Instrument Approach Procedure             | NS ABTMT | Noise Abatement   |
| ICAO   | International Civil Aviation Organization | NSTD     | nonstandard   |
| IFR    | Instrument Flight Rules                   | ntc      | notice  |
| ILS    | Instrument Landing System                 | obsn     | observation   |
| IM     | Inner Marker                              | Oct      | October   |
| IMG    | Immigration                               | OLF      | Outlying Field  |
| incr   | increase                                  | opr      | operate, operator, operational                          |
| indef  | indefinite                                | ops      | operations  |
| ints   | intensity                                 | OTS      | out of service  |
| invo   | in the vicinity of                        | ovrn     | overrun   |
| IMC    | Instrument Meteorological Conditions      | PAEW     | personnel and equipment working                         |
| Jan    | January                                   | pat      | pattern   |
| JASU   | Jet Aircraft Starting Unit                | p-line   | power line  |
| JOAP   | Joint Oil Analysis Program                | PMSV     | Pilot-to-Metro Service                                  |
| JOSAC  | Joint Operational Support Airlift Center  | POL      | Petrol, Oils and Lubricants                             |
| JRB    | Joint Reserve Base                        | PPR      | prior permission required                               |
| Jul    | July                                      | PRM      | Precision Runway Monitoring                             |
| Jun    | June                                      | PTD      | Pilot to Dispatcher                                     |
| Kt     | Knots                                     | RAMCC    | Regional Air Movement Control Center                    |
| LAA    | Local Airport Advisory                    | req      | request   |
| LAHSO  | Land and Hold Short Operations            | rgt tfc  | right traffic   |
| lbs    | pounds                                    | RON      | Remain Overnight  |
| ldg    | landing                                   | rqr      | require   |
| lgtd   | lighted                                   | rstd     | restricted  |
| lgts   | lights                                    | RSRS     | reduced same runway separation                          |
| LMM    | Compass locator at Middle Marker ILS      | rwy      | runway  |
| LOC    | Localizer                                 | Sat      | Saturday  |
| LOM    | Compass locator at Outer Marker ILS       | SELF     | Strategic Expeditionary Landing Field                   |
| ltd    | limited                                   | Sep      | September   |
| MACC   | Military Area Control Center              | SFA      | Single Frequency Approach                               |
| Mar    | March                                     | sfc      | surface   |
| MCAF   | Marine Corps Air Facility                 | SFRA     | Special Flight Rules Area                               |
| MICALF | Marine Corps Auxiliary Landing Field      | SOAP     | Spectrometric Oil Analysis Program                      |
| MCAS   | Marine Corps Air Station                  | SOF      | Supervisor of Flying                                    |
| MCB    | Marine Corps Base                         | SPB      | Seaplane Base   |
| med    | medium                                    | SR       | sunrise   |
| METRO  | Pilot-to-Metro voice call                 | SS       | sunset  |
| Mil    | military                                  | std      | standard  |
| min    | minute                                    | Sun      | Sunday  |
| MLS    | Microwave Landing System                  | svc      | service   |
| MM     | Middle Marker of ILS                      | tfc      | traffic   |
| Mon    | Monday                                    | thld     | threshold   |
| MP     | Maintenance Period                        | Thu      | Thursday  |
| MSL    | mean sea level                            | tkf      | take-off  |
| MSAW   | minimum safe altitude warning             | tmpry    | temporary   |
| NAAS   | Naval Auxiliary Air Station               | tran     | transient   |
| NADC   | Naval Air Development Center              | Tue      | Tuesday   |
| NADEP  | Naval Air Depot                           | twr      | tower   |
| NAEC   | Naval Air Engineering Center              | twy      | taxiway   |
| NAES   | Naval Air Engineering Station             | UC       | Under Construction                                      |
| NAF    | Naval Air Facility                        | USA      | United States Army                                      |
| NALCO  | Naval Air Logistics Control Office        | USAF     | United States Air Force                                 |
| NALO   | Navy Air Logistics Office                 | USCG     | United States Coast Guard                               |
| NALF   | Naval Auxiliary Landing Field             | USN      | United States Navy                                      |
| NAS    | Naval Air Station                         | V        | Defense Switching Network (telephone, formerly AUTOVON) |
| NAWC   | Naval Air Warfare Center                  | VFR      | Visual Flight Rules                                     |
| NAWS   | Naval Air Weapons Station                 | VIP      | Very Important Person                                   |
| ngt    | night                                     | VMC      | Visual Meteorological Conditions                        |
| NOLF   | Naval Outlying Field                      | Wed      | Wednesday   |
| Nov    | November                                  | wx       | weather   |

# DIRECTORY LEGEND

## SAMPLE

① CITY NAME  
 ② AIRPORT NAME (ALTERNATE NAME) (LTS) (KLTS) CIV/MIL 3 N UTC-6(-5DT) N34°41.93' W99°20.20' JACKSONVILLE  
 ③ 200 B S4 FUEL 100 OX 1 TPA-1000(800) AOE Class IV, ARFF Index A NOTAM FILE ORL Not insp. COPTER  
 ④ ⑤ ⑥ ⑦ ⑧ ⑨ H-46, L-19C IAP, DIAP, AD

⑩ RWY 18-36: H12004X200 (ASPH-CONC-GRVD)  
 S-90, D-160, DT-300 PCN 80 R/B/W/T HIRL CL  
 RWY 18: LDIN. MALSF. TDZL. REIL. PAPI(P2R)—GA 3.0° TCH 36'.  
 Thld dsplcd 300'. Trees. Rgt tfc. 0.3% up.  
 RWY 36: ALSF1. 0.4% down.  
 RWY 09-27: H6000X150 (ASPH) MIRL  
 RWY 173-353: H3515X150 (ASPH-PFC) AUW PCN 59 F/A/W/T

⑪ LAND AND HOLD SHORT OPERATIONS  
 LANDING HOLD SHORT POINT DIST AVBL  
 RWY 18 09-27 6500  
 RWY 36 09-27 5400

⑫ RUNWAY DECLARED DISTANCE INFORMATION  
 RWY 18: TORA-12004 TODA-12704 ASDA-11704 LDA-11504  
 RWY 36: TORA-12004 TODA-12004 ASDA-12004 LDA-11704

⑬ ARRESTING GEAR/SYSTEM  
 RWY 18 → HOOK E5 (65' OVRN) BAK-14 BAK-12B (1650')  
 BAK-14 BAK-12 (B) (1087') HOOK E5 (74' OVRN) ← RWY 36

⑭ MILITARY SERVICE: A-GEAR E-5 connected on dep end, disconnected on  
 apch end. JASU 3(AM32A-60) 2(A/M32A-86)

⑮ ⑯ ⑰ ⑱ ⑲ ⑳ ㉑ ㉒ ㉓ ㉔ ㉕ ㉖ ㉗ ㉘ ㉙ ㉚ ㉛ ㉜ ㉝ ㉞ ㉟ ㊱ ㊲ ㊳ ㊴ ㊵ ㊶ ㊷ ㊸ ㊹ ㊺ ㊻ ㊼ ㊽ ㊾ ㊿

⑳ FUEL J8(Mil) (NC-100, A) FLUID W SP PRESAIR LOX  
 OIL O-128 TRAN ALERT Avbl 1300-0200Z†, svc limited weekends.

㉑ AIRPORT REMARKS: Special Air Traffic Rules—Part 93, see Regulatory Notices. Attended 1200-0300Z†. Parachute  
 Jumping. Deer invov arpt. Heavy jumbo jet training surface to 9000'. Twy A clsd indef. Flight Notification Service  
 (ADCUS) avbl.

㉒ MILITARY REMARKS: ANG PPR/Official Business Only. Base OPS DSN 638-4390, C503-335-4222. Ctc Base OPS 15  
 minutes prior to ldg and after dep. Limited tran parking.

㉓ WEATHER DATA SOURCES: AWOS-1 120.3 (202) 426-8000. LLWAS.

㉔ COMMUNICATIONS: SFA ATIS 127.25 273.5 (202) 426-8003 UNICOM 122.95 PTD 372.2  
 NAME FSS (ORL) on arpt. 123.65 122.65 122.2  
 NAME RCO 112.2T 112.1R (NAME RADIO)  
 NAME APP/DEP CON 128.35 257.725 (1200-0400Z†)  
 TOWER 119.65 255.6 (1200-0400Z†) GND CON 121.7 GCO 135.075 (ORLANDO CLNC) CLNC DEL 125.55  
 NAME COMD POST (GERONIMO) 311.0 321.4 6761 PMSV METRO 239.8 NAME OPS 257.5

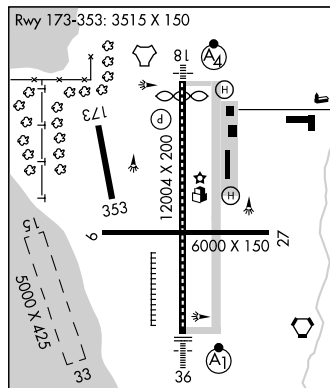
㉕ AIRSPACE: CLASS B See VFR Terminal Area Chart.

㉖ RADIO AIDS TO NAVIGATION: NOTAM FILE ORL. VHF/DF ctc FSS.  
 (H) VORTAC 112.2 MCO Chan 59 N28°32.55' W81°20.12' at fld. 1110/8E.  
 (H) TACAN Chan 29 CBU (109.2) N28°32.65' W81°21.12' at fld. 1115/8E.  
 HERNY NDB (LOM) 221 OR N28°37.40' W81°21.05' 177° 5.4 NM to fld.  
 ILS/DME 108.5 I-ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.  
 ASR/PAR (1200-0400Z†)

㉗ COMM/NAV/WEATHER REMARKS: Emerg frequency 121.5 not avbl at twr.

HELIPAD H1: H100X75 (ASPH)  
 HELIPAD H2: H60X60 (ASPH)  
 HELIPORT REMARKS: Helipad H1 lctd on general aviation side and H2 lctd on air carrier side of arpt.

187 TPA 1000(813)  
 WATERWAY 15-33: 5000X425 (WATER)  
 SEAPLANE REMARKS: Birds roosting and feeding areas along river banks. Seaplanes operating adjacent to SW side of  
 arpt not visible from twr and are required to ctc twr.



All bearings and radials are magnetic unless otherwise specified.  
 All mileages are nautical unless otherwise noted.

All times are Coordinated Universal Time (UTC) except as noted.

All elevations are in feet above/below Mean Sea Level (MSL) unless otherwise noted.

The horizontal reference datum of this publication is North American Datum of 1983 (NAD83), which for charting purposes is considered equivalent to World Geodetic System 1984 (WGS 84).

10

# SKETCH LEGEND

## RUNWAYS/LANDING AREAS

|                                |  |
|--------------------------------|--|
| Hard Surfaced .....            |  |
| Metal Surface .....            |  |
| Sod, Gravel, etc. ....         |  |
| Light Plane, ....              |  |
| Ski Landing Area or Water      |  |
| Under Construction .....       |  |
| Closed .....                   |  |
| Helicopter Landings Area ..... |  |
| Displaced Threshold .....      |  |
| Taxiway, Apron and Stopways .. |  |

## MISCELLANEOUS BASE AND CULTURAL FEATURES

|                               |  |
|-------------------------------|--|
| Buildings .....               |  |
| Power Lines .....             |  |
| Fence .....                   |  |
| Towers .....                  |  |
| Tanks .....                   |  |
| Oil Well .....                |  |
| Smoke Stack .....             |  |
| Obstruction .....             |  |
| Controlling Obstruction ..... |  |
| Trees .....                   |  |
| Populated Places .....        |  |
| Cuts and Fills .....          |  |
| Cliffs and Depressions ..     |  |
| Ditch .....                   |  |
| Hill .....                    |  |

## RADIO AIDS TO NAVIGATION

|             |  |              |  |
|-------------|--|--------------|--|
| VORTAC ...  |  | VOR .....    |  |
| VOR/DME ... |  | NDB .....    |  |
| TACAN ...   |  | NDB/DME .... |  |

## MISCELLANEOUS AERONAUTICAL FEATURES

|                      |  |
|----------------------|--|
| Airport Beacon ..... |  |
| Wind Cone .....      |  |
| Landing Tee .....    |  |
| Tetrahedron .....    |  |
| Control Tower .....  |  |

## APPROACH LIGHTING SYSTEMS

A dot "•" portrayed with approach lighting letter identifier indicates sequenced flashing lights (F) installed with the approach lighting system e.g. (A1) Negative symbology, e.g., (A1) (V) indicates Pilot Controlled Lighting (PCL).

|  |  |
|--|--|
| Runway Centerline Lighting .....   |  |
| (A) Approach Lighting System ALSF-2 ..   |  |
| (A1) Approach Lighting System ALSF-1 ..  |  |
| (A2) Short Approach Lighting System SALS/SALSF .....   |  |
| (A3) Simplified Short Approach Lighting System (SSALR) with RAIL .....   |  |
| (A4) Medium Intensity Approach Lighting System (MALSR and MALSF)/(SSALS and SSALF) .....                           |  |
| (A5) Medium Intensity Approach Lighting System (MALSR) and RAIL .....  |  |
| (+) Omnidirectional Approach Lighting System (ODALS) .....   |  |
| (D) Navy Parallel Row and Cross Bar ..   |  |
| (F) Air Force Overrun .....  |  |
| (V) Visual Approach Slope Indicator with Standard Threshold Clearance provided                                     |  |
| (V2) Pulsating Visual Approach Slope Indicator (PVASI)   |  |
| (V3) Visual Approach Slope Indicator with a threshold crossing height to accommodate long bodied or jumbo aircraft |  |
| (V4) Tri-color Visual Approach Slope Indicator (TRCV)  |  |
| (V5) Approach Path Alignment Panel (APAP)  |  |
| (P) Precision Approach Path Indicator (PAPI)   |  |

## LEGEND

This directory is a listing of data on record with the FAA on all open to the public airports, military facilities and selected private use facilities specifically requested by the Department of Defense (DoD) for which a DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures Publication. Additionally this listing contains data for associated terminal control facilities, air route traffic control centers, and radio aids to navigation within the conterminous United States, Puerto Rico and the Virgin Islands. Joint civil/military and civil airports are listed alphabetically by state, associated city and airport name and cross-referenced by airport name. Military facilities are listed alphabetically by state and official airport name and cross-referenced by associated city name. Nav aids, flight service stations and remote communication outlets that are associated with an airport, but with a different name, are listed alphabetically under their own name, as well as under the airport with which they are associated.

The listing of an open to the public airport in this directory merely indicates the airport operator's willingness to accommodate transient aircraft, and does not represent that the facility conforms with any Federal or local standards, or that it has been approved for use on the part of the general public. Military and private use facilities published in this directory are open to civil pilots only in an emergency or with prior permission. See Special Notice Section, Civil Use of Military Fields.

The information on obstructions is taken from reports submitted to the FAA. Obstruction data has not been verified in all cases. Pilots are cautioned that objects not indicated in this tabulation (or on the airports sketches and/or charts) may exist which can create a hazard to flight operation. Detailed specifics concerning services and facilities tabulated within this directory are contained in the Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

The legend items that follow explain in detail the contents of this Directory and are keyed to the circled numbers on the sample on the preceding pages.

**① CITY/AIRPORT NAME**

Civil and joint civil/military airports and facilities in this directory are listed alphabetically by state and associated city. Where the city name is different from the airport name the city name will appear on the line above the airport name. Airports with the same associated city name will be listed alphabetically by airport name and will be separated by a dashed rule line. A solid rule line will separate all others. FAA approved helipads and seaplane landing areas associated with a land airport will be separated by a dotted line. Military airports are listed alphabetically by state and official airport name.

**② ALTERNATE NAME**

Alternate names, if any, will be shown in parentheses.

**③ LOCATION IDENTIFIER**

The location identifier is a three or four character FAA code followed by a four-character ICAO code assigned to airports. ICAO codes will only be published at joint civil/military, and military facilities. If two different military codes are assigned, both codes will be shown with the primary operating agency's code listed first. These identifiers are used by ATC in lieu of the airport name in flight plans, flight strips and other written records and computer operations. Zeros will appear with a slash to differentiate them from the letter "O".

**④ OPERATING AGENCY**

Airports within this directory are classified into two categories, Military/Federal Government and Civil airports open to the general public, plus selected private use airports. The operating agency is shown for military, private use and joint civil/military airports. The operating agency is shown by an abbreviation as listed below. When an organization is a tenant, the abbreviation is enclosed in parenthesis. No classification indicates the airport is open to the general public with no military tenant.

|         |                                       |      |   |
|---------|---------------------------------------|------|---|
| A       | US Army                               | MC   | Marine Corps                            |
| AFRC    | Air Force Reserve Command             | N    | Navy                                    |
| AF      | US Air Force                          | NAF  | Naval Air Facility                      |
| ANG     | Air National Guard                    | NAS  | Naval Air Station                       |
| AR      | US Army Reserve                       | NASA | National Air and Space Administration   |
| ARNG    | US Army National Guard                | P    | US Civil Airport Wherein Permit Covers  |
| CG      | US Coast Guard                        |      | Use by Transient Military Aircraft      |
| CIV/MIL | Joint Use Civil/Military              | PVT  | Private Use Only (Closed to the Public) |
| DND     | Department of National Defense Canada |      |   |

**⑤ AIRPORT LOCATION**

Airport location is expressed as distance and direction from the center of the associated city in nautical miles and cardinal points, e.g., 4 NE.

**⑥ TIME CONVERSION**

Hours of operation of all facilities are expressed in Coordinated Universal Time (UTC) and shown as "Z" time. The directory indicates the number of hours to be subtracted from UTC to obtain local standard time and local daylight saving time UTC-5(-4DT). The symbol ‡ indicates that during periods of Daylight Saving Time effective hours will be one hour earlier than shown. In those areas where daylight saving time is not observed the (-4DT) and ‡ will not be shown. Daylight saving time is in effect from 0200 local time the second Sunday in March to 0200 local time the first Sunday in November. Canada and all U.S. Conterminous States observe daylight saving time except Arizona and Puerto Rico, and the Virgin Islands. If the state observes daylight saving time and the operating times are other than daylight saving times, the operating hours will include the dates, times and no ‡ symbol will be shown, i.e., April 15-Aug 31 0630-1700Z, Sep 1-Apr 14 0600-1700Z.

# **7 GEOGRAPHIC POSITION OF AIRPORT—AIRPORT REFERENCE POINT (ARP)**

Positions are shown as hemisphere, degrees, minutes and hundredths of a minute and represent the approximate geometric center of all usable runway surfaces.

# **8 CHARTS**

Charts refer to the Sectional Chart and Low and High Altitude Enroute Chart and panel on which the airport or facility is located. Helicopter Chart locations will be indicated as COPTER.

# **9 INSTRUMENT APPROACH PROCEDURES, AIRPORT DIAGRAM**

IAP indicates an airport for which a prescribed (Public Use) FAA Instrument Approach Procedure has been published. DIAP indicates an airport for which a prescribed DoD Instrument Approach Procedure has been published in the U.S. Terminal Procedures. See the Special Notice Section of this directory, Civil Use of Military Fields and the Aeronautical Information Manual 5-4-5 Instrument Approach Procedure Charts for additional information. AD indicates an airport for which an airport diagram has been published. Airport diagrams are located in the back of each A/FD volume alphabetically by associated city and airport name.

# **10 AIRPORT SKETCH**

The airport sketch, when provided, depicts the airport and related topographical information as seen from the air and should be used in conjunction with the text. It is intended as a guide for pilots in VFR conditions. Symbology that is not self-explanatory will be reflected in the sketch legend. The airport sketch will be oriented with True North at the top. Airport sketches will be added incrementally.

# **11 ELEVATION**

The highest point of an airport's usable runways measured in feet from mean sea level. When elevation is sea level it will be indicated as "00". When elevation is below sea level a minus "-" sign will precede the figure.

# **12 ROTATING LIGHT BEACON**

B indicates rotating beacon is available. Rotating beacons operate sunset to sunrise unless otherwise indicated in the AIRPORT REMARKS or MILITARY REMARKS segment of the airport entry.

# **13 SERVICING—CIVIL**

|  |  |
|--|--|
| S1: Minor airframe repairs.                      | S5: Major airframe repairs.                      |
| S2: Minor airframe and minor powerplant repairs. | S6: Minor airframe and major powerplant repairs. |
| S3: Major airframe and minor powerplant repairs. | S7: Major powerplant repairs.                    |
| S4: Major airframe and major powerplant repairs. | S8: Minor powerplant repairs.                    |

# **14 FUEL**

| CODE  | FUEL  | CODE     | FUEL   |
|-------|---|----------|--|
| 80    | Grade 80 gasoline (Red)   | B+       | Jet B, Wide-cut, turbine fuel with FS-II*, FP** minus 50° C.   |
| 100   | Grade 100 gasoline (Green)                                      | J4 (JP4) | (JP-4 military specification) FP** minus 58° C.  |
| 100LL | 100LL gasoline (low lead) (Blue)                                | J5 (JP5) | (JP-5 military specification) Kerosene with FS-11, FP** minus 46°C.  |
| 115   | Grade 115 gasoline (115/145 military specification) (Purple)    | J8 (JP8) | (JP-8 military specification) Jet A-1, Kerosene with FS-II*, FP** minus 47°C.  |
| A     | Jet A, Kerosene, without FS-II*, FP** minus 40° C.              | J8+100   | (JP-8 military specification) Jet A-1, Kerosene with FS-II*, FP** minus 47°C, with-fuel additive package that improves thermo stability characteristics of JP-8. |
| A+    | Jet A, Kerosene, with FS-II*, FP** minus 40°C.                  | J        | (Jet Fuel Type Unknown)  |
| A1    | Jet A-1, Kerosene, without FS-II*, FP** minus 47°C.             | MOGAS    | Automobile gasoline which is to be used as aircraft fuel.  |
| A1+   | Jet A-1, Kerosene with FS-II*, FP** minus 47° C.                |          |  |
| B     | Jet B, Wide-cut, turbine fuel without FS-II*, FP** minus 50° C. |          |  |

\*(Fuel System Icing Inhibitor)

\*\*(Freeze Point)

**NOTE:** Certain automobile gasoline may be used in specific aircraft engines if a FAA supplemental type certificate has been obtained. Automobile gasoline, which is to be used in aircraft engines, will be identified as "MOGAS", however, the grade/type and other octane rating will not be published.

Data shown on fuel availability represents the most recent information the publisher has been able to acquire. Because of a variety of factors, the fuel listed may not always be obtainable by transient civil pilots. Confirmation of availability of fuel should be made directly with fuel suppliers at locations where refueling is planned.

# **15 OXYGEN—CIVIL**

|                    |  |
|--------------------|--|
| OX 1 High Pressure | OX 3 High Pressure—Replacement Bottles |
| OX 2 Low Pressure  | OX 4 Low Pressure—Replacement Bottles  |

# **16 TRAFFIC PATTERN ALTITUDE**

Traffic Pattern Altitude (TPA)—The first figure shown is TPA above mean sea level. The second figure in parentheses is TPA above airport elevation. Multiple TPA shall be shown as "TPA—See Remarks" and detailed information shall be shown in the Airport or Military Remarks Section. Traffic pattern data for USAF bases, USN facilities, and U.S. Army airports (including those on which ACC or U.S. Army is a tenant) that deviate from standard pattern altitudes shall be shown in Military Remarks.

**17 AIRPORT OF ENTRY, LANDING RIGHTS, AND CUSTOMS USER FEE AIRPORTS**

U.S. CUSTOMS USER FEE AIRPORT—Private Aircraft operators are frequently required to pay the costs associated with customs processing.

AOE—Airport of Entry. A customs Airport of Entry where permission from U.S. Customs is not required to land. However, at least one hour advance notice of arrival is required.

LRA—Landing Rights Airport. Application for permission to land must be submitted in advance to U.S. Customs. At least one hour advance notice of arrival is required.

NOTE: Advance notice of arrival at both an AOE and LRA airport may be included in the flight plan when filed in Canada or Mexico. Where Flight Notification Service (ADCUS) is available the airport remark will indicate this service. This notice will also be treated as an application for permission to land in the case of an LRA. Although advance notice of arrival may be relayed to Customs through Mexico, Canada, and U.S. Communications facilities by flight plan, the aircraft operator is solely responsible for ensuring that Customs receives the notification. (See Customs, Immigration and Naturalization, Public Health and Agriculture Department requirements in the International Flight Information Manual for further details.)

US Customs Air and Sea Ports, Inspectors and Agents

Northeast Sector (New England and Atlantic States—ME to MD)

407-975-1740

Southeast Sector (Atlantic States—DC, WV, VA to FL)

407-975-1780

Central Sector (Interior of the US, including Gulf states—MS, AL, LA)

407-975-1760

Southwest East Sector (OK and eastern TX)

407-975-1840

Southwest West Sector (Western TX, NM and AZ)

407-975-1820

Pacific Sector (WA, OR, CA, HI and AK)

407-975-1800

**18 CERTIFICATED AIRPORT (14 CFR PART 139)**

Airports serving Department of Transportation certified carriers and certified under 14 CFR part 139 are indicated by the Class and the ARFF Index; e.g. Class I, ARFF Index A, which relates to the availability of crash, fire, rescue equipment. Class I airports can have an ARFF Index A through E, depending on the aircraft length and scheduled departures. Class II, III, and IV will always carry an Index A.

14 CFR PART 139 CERTIFICATED AIRPORTS  
AIRPORT CLASSIFICATIONS

| Type of Air Carrier Operation                                     | Class I | Class II | Class III | Class IV |
|---|---------|----------|-----------|----------|
| Scheduled Air Carrier Aircraft with 31 or more passenger seats    | X       |          |           |          |
| Unscheduled Air Carrier Aircraft with 31 or more passengers seats | X       | X        |           | X        |
| Scheduled Air Carrier Aircraft with 10 to 30 passenger seats      | X       | X        | X         |          |

**14 CFR—PART 139 CERTIFICATED AIRPORTS****INDICES AND AIRCRAFT RESCUE AND FIRE FIGHTING EQUIPMENT REQUIREMENTS**

| Airport Index | Required No. Vehicles | Aircraft Length                       | Scheduled Departures | Agent + Water for Foam                                    |
|---------------|-----------------------|---------------------------------------|----------------------|---|
| A             | 1                     | <90'                                  | ≥1                   | 500#DC or HALON 1211 or 450#DC + 100 gal H <sub>2</sub> O |
| B             | 1 or 2                | ≥90', <126'<br>-----<br>≥126', <159'  | ≥5<br>-----<br><5    | Index A + 1500 gal H <sub>2</sub> O                       |
| C             | 2 or 3                | ≥126', <159'<br>-----<br>≥159', <200' | ≥5<br>-----<br><5    | Index A + 3000 gal H <sub>2</sub> O                       |
| D             | 3                     | ≥159', <200'<br>-----<br>>200'        | <5                   | Index A + 4000 gal H <sub>2</sub> O                       |
| E             | 3                     | ≥200'                                 | ≥5                   | Index A + 6000 gal H <sub>2</sub> O                       |

> Greater Than; < Less Than; ≥ Equal or Greater Than; ≤ Equal or Less Than; H<sub>2</sub>O—Water; DC—Dry Chemical.

NOTE: The listing of ARFF index does not necessarily assure coverage for non-air carrier operations or at other than prescribed times for air carrier. ARFF Index Ltd.—indicates ARFF coverage may or may not be available, for information contact airport manager prior to flight.

**19 NOTAM SERVICE**

All public use landing areas are provided NOTAM "D" (distant dissemination) and NOTAM "L" (local dissemination) service. Airport NOTAM file identifier is shown for individual airports, e.g. "NOTAM FILE IAD". See AIM, Basic Flight Information and



ATC Procedures for detailed description of NOTAM's. Current NOTAMS are available from Flight Service Stations at 1-800-WX-BRIEF. Real time Military NOTAMS are available using the DoD Internet NOTAM Distribution System (DINS) [www.notams.jcs.mil](http://www.notams.jcs.mil).

## 20 FAA INSPECTION

All airports not inspected by FAA will be identified by the note: Not insp. This indicates that the airport information has been provided by the owner or operator of the field.

## 21 RUNWAY DATA

Runway information is shown on two lines. That information common to the entire runway is shown on the first line while information concerning the runway ends is shown on the second or following line. Runway direction, surface, length, width, weight bearing capacity, lighting, and slope, when available are shown for each runway. Multiple runways are shown with the longest runway first. Direction, length, width, and lighting are shown for sea-lanes. The full dimensions of helipads are shown, e.g., 50X150. Runway data that requires clarification will be placed in the remarks section.

### RUNWAY DESIGNATION

Runways are normally numbered in relation to their magnetic orientation rounded off to the nearest 10 degrees. Parallel runways can be designated L (left)/R (right)/C (center). Runways may be designated as STOL, Ultralight, or assault strips. Assault strips are shown by magnetic bearing.

### RUNWAY DIMENSIONS

Runway length and width are shown in feet. Length shown is runway end to end including displaced thresholds, but excluding those areas designed as overruns.

### RUNWAY SURFACE AND LENGTH

Runway lengths prefixed by the letter "H" indicate that the runways are hard surfaced (concrete, asphalt, or part asphalt-concrete). If the runway length is not prefixed, the surface is sod, clay, etc. The runway surface composition is indicated in parentheses after runway length as follows:

|                                     |   |                                      |
|-------------------------------------|---|--------------------------------------|
| (AFSC)—Aggregate friction seal coat | (GRVL)—Gravel, or cinders                                 | (PSP)—Pierced steel plank            |
| (ASPH)—Asphalt                      | (MATS)—Pierced steel planking,<br>landing mats, membranes | (RFSC)—Rubberized friction seal coat |
| (CONC)—Concrete                     | (PEM)—Part concrete, part asphalt                         | (TURF)—Turf                          |
| (DIRT)—Dirt                         | (PFC)—Porous friction courses                             | (TRTD)—Treated                       |
| (GRVD)—Grooved                      |   | (WC)—Wire combed                     |

### RUNWAY WEIGHT BEARING CAPACITY

Runway strength data shown in this publication is derived from available information and is a realistic estimate of capability at an average level of activity. It is not intended as a maximum allowable weight or as an operating limitation. Many airport pavements are capable of supporting limited operations with gross weights in excess of the published figures. Permissible operating weights, insofar as runway strengths are concerned, are a matter of agreement between the owner and user. When desiring to operate into any airport at weights in excess of those published in the publication, users should contact the airport management for permission. Runway strength figures are shown in thousand of pounds, with the last three figures being omitted. Add 000 to figure following S, D, 2S, 2T, AUW, SWL, etc., for gross weight capacity. A blank space following the letter designator is used to indicate the runway can sustain aircraft with this type landing gear, although definite runway weight bearing capacity figures are not available, e.g., S, D. Applicable codes for typical gear configurations with S=Single, D=Dual, T=Triple and Q=Quadruple:

| CURRENT | NEW    | NEW DESCRIPTION  |
|---------|--------|--|
| S       | S      | Single wheel type landing gear (DC3), (C47), (F15), etc.   |
| D       | D      | Dual wheel type landing gear (BE1900), (B737), (A319), etc.  |
| T       | D      | Dual wheel type landing gear (P3, C9).   |
| ST      | 2S     | Two single wheels in tandem type landing gear (C130).  |
| TRT     | 2T     | Two triple wheels in tandem type landing gear (C17), etc.  |
| DT      | 2D     | Two dual wheels in tandem type landing gear (B707), etc.   |
| TT      | 2D     | Two dual wheels in tandem type landing gear (B757, KC135).   |
| SBTT    | 2D/D1  | Two dual wheels in tandem/dual wheel body gear type landing gear (KC10).                           |
| None    | 2D/2D1 | Two dual wheels in tandem/two dual wheels in tandem body gear type landing gear (A340-600).        |
| DDT     | 2D/2D2 | Two dual wheels in tandem/two dual wheels in double tandem body gear type landing gear (B747, E4). |
| TTT     | 3D     | Three dual wheels in tandem type landing gear (B777), etc.   |
| TT      | D2     | Dual wheel gear two struts per side main gear type landing gear (B52).                             |
| TDT     | C5     | Complex dual wheel and quadruple wheel combination landing gear (C5).                              |

AUW—All up weight. Maximum weight bearing capacity for any aircraft irrespective of landing gear configuration.

SWL—Single Wheel Loading. (This includes information submitted in terms of Equivalent Single Wheel Loading (ESWL) and Single Isolated Wheel Loading).

PSI—Pounds per square inch. PSI is the actual figure expressing maximum pounds per square inch runway will support, e.g., (SWL 000/PSI 535).

Omission of weight bearing capacity indicates information unknown.

The ACN/PCN System is the ICAO standard method of reporting pavement strength for pavements with bearing strengths greater than 12,500 pounds. The Pavement Classification Number (PCN) is established by an engineering assessment of the runway. The PCN is for use in conjunction with an Aircraft Classification Number (ACN). Consult the Aircraft Flight Manual, Flight Information Handbook, or other appropriate source for ACN tables or charts. Currently, ACN data may not be available for all aircraft. If an ACN table or chart is available, the ACN can be calculated by taking into account the aircraft weight, the pavement type, and the subgrade category. For runways that have been evaluated under the ACN/PCN system, the PCN will be shown as a five-part code (e.g. PCN 80 R/B/W/T). Details of the coded format are as follows:

- (1) The PCN NUMBER—The reported PCN indicates that an aircraft with an ACN equal or less than the reported PCN can operate on the pavement subject to any limitation on the tire pressure.
- (2) The type of pavement:
  - R — Rigid
  - F — Flexible
- (3) The pavement subgrade category:
  - A — High
  - B — Medium
  - C — Low
  - D — Ultra-low
- (4) The maximum tire pressure authorized for the pavement:
  - W — High, no limit
  - X — Medium, limited to 217 psi
  - Y — Low, limited to 145 psi
  - Z — Very low, limited to 73 psi
- (5) Pavement evaluation method:
  - T — Technical evaluation
  - U — By experience of aircraft using the pavement

NOTE: Prior permission from the airport controlling authority is required when the ACN of the aircraft exceeds the published PCN or aircraft tire pressure exceeds the published limits.

#### RUNWAY LIGHTING

Lights are in operation sunset to sunrise. Lighting available by prior arrangement only or operating part of the night and/or pilot controlled lighting with specific operating hours are indicated under airport or military remarks. At USN/USMC facilities lights are available only during airport hours of operation. Since obstructions are usually lighted, obstruction lighting is not included in this code. Unlighted obstructions on or surrounding an airport will be noted in airport or military remarks. Runway lights nonstandard (NSTD) are systems for which the light fixtures are not FAA approved L-800 series: color, intensity, or spacing does not meet FAA standards. Nonstandard runway lights, VASI, or any other system not listed below will be shown in airport remarks or military service. Temporary, emergency or limited runway edge lighting such as flares, smudge pots, lanterns or portable runway lights will also be shown in airport remarks or military service. Types of lighting are shown with the runway or runway end they serve.

NSTD—Light system fails to meet FAA standards.

LIRL—Low Intensity Runway Lights.

MIRL—Medium Intensity Runway Lights.

HIRL—High Intensity Runway Lights.

RAIL—Runway Alignment Indicator Lights.

REIL—Runway End Identifier Lights.

CL—Centerline Lights.

TDZL—Touchdown Zone Lights.

ODALS—Omni Directional Approach Lighting System.

AF OVRN—Air Force Overrun 1000' Standard Approach Lighting System.

LDIN—Lead-In Lighting System.

MALS—Medium Intensity Approach Lighting System.

MALSF—Medium Intensity Approach Lighting System with Sequenced Flashing Lights.

MALSR—Medium Intensity Approach Lighting System with Runway Alignment Indicator Lights.

SALS—Short Approach Lighting System.

SALSF—Short Approach Lighting System with Sequenced Flashing Lights.

SSALS—Simplified Short Approach Lighting System.

SSALF—Simplified Short Approach Lighting System with Sequenced Flashing Lights.

SSALR—Simplified Short Approach Lighting System with Runway Alignment Indicator Lights.

ALSAF—High Intensity Approach Lighting System with Sequenced Flashing Lights.

ALSF1—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category I, Configuration.

ALSF2—High Intensity Approach Lighting System with Sequenced Flashing Lights, Category II, Configuration.

SF—Sequenced Flashing Lights.

OLS—Optical Landing System.

WAVE—OFF.

NOTE: Civil ALSF2 may be operated as SSALR during favorable weather conditions. When runway edge lights are positioned more than 10 feet from the edge of the usable runway surface a remark will be added in the "Remarks" portion of the airport entry. This is applicable to Air Force, Air National Guard and Air Force Reserve Bases, and those joint civil/military airfields on which they are tenants.

## VISUAL GLIDESLOPE INDICATORS

APAP—A system of panels, which may or may not be lighted, used for alignment of approach path.

PNIL APAP on left side of runway

PNIR APAP on right side of runway

PAPI—Precision Approach Path Indicator

P2L 2-identical light units placed on left side of runway

P4L 4-identical light units placed on left side of runway

P2R 2-identical light units placed on right side of runway

P4R 4-identical light units placed on right side of runway

PVASI—Pulsating/steady burning visual approach slope indicator, normally a single light unit projecting two colors.

PSIL PVASI on left side of runway

PSIR PVASI on right side of runway

SAVASI—Simplified Abbreviated Visual Approach Slope Indicator

S2L 2-box SAVASI on left side of runway

S2R 2-box SAVASI on right side of runway

TRCV—Tri-color visual approach slope indicator, normally a single light unit projecting three colors.

TRIL TRCV on left side of runway

TRIR TRCV on right side of runway

VASI—Visual Approach Slope Indicator

V2L 2-box VASI on left side of runway

V6L 6-box VASI on left side of runway

V2R 2-box VASI on right side of runway

V6R 6-box VASI on right side of runway

V4L 4-box VASI on left side of runway

V12 12-box VASI on both sides of runway

V4R 4-box VASI on right side of runway

V16 16-box VASI on both sides of runway

NOTE: Approach slope angle and threshold crossing height will be shown when available; i.e., -GA 3.5° TCH 37'.

## PILOT CONTROL OF AIRPORT LIGHTING

| Key Mike                 | Function   |
|--------------------------|--|
| 7 times within 5 seconds | Highest intensity available                            |
| 5 times within 5 seconds | Medium or lower intensity<br>(Lower REIL or REIL-Off)  |
| 3 times within 5 seconds | Lowest intensity available<br>(Lower REIL or REIL-Off) |

Available systems will be indicated in the airport or military remarks, e.g., ACTIVATE HIRL Rwy 07–25, MALSR Rwy 07, and VASI Rwy 07—122.8.

Where the airport is not served by an instrument approach procedure and/or has an independent type system of different specification installed by the airport sponsor, descriptions of the type lights, method of control, and operating frequency will be explained in clear text. See AIM, "Basic Flight Information and ATC Procedures," for detailed description of pilot control of airport lighting.

## RUNWAY SLOPE

When available, runway slope data will only be provided for those airports with an approved FAA instrument approach procedure. Runway slope will be shown only when it is 0.3 percent or greater. On runways less than 8000 feet, the direction of the slope up will be indicated, e.g., 0.3% up NW. On runways 8000 feet or greater, the slope will be shown (up or down) on the runway end line, e.g., RWY 13: 0.3% up., RWY 21: Pole. Rgt tfc. 0.4% down.

## RUNWAY END DATA

Information pertaining to the runway approach end such as approach lights, touchdown zone lights, runway end identification lights, visual glideslope indicators, displaced thresholds, controlling obstruction, and right hand traffic pattern, will be shown on the specific runway end. "Rgt tfc"—Right traffic indicates right turns should be made on landing and takeoff for specified runway end.

## LAND AND HOLD SHORT OPERATIONS (LAHSO)

LAHSO is an acronym for "Land and Hold Short Operations." These operations include landing and holding short of an intersection runway, an intersecting taxiway, or other predetermined points on the runway other than a runway or taxiway. Measured distance represents the available landing distance on the landing runway, in feet.

Specific questions regarding these distances should be referred to the air traffic manager of the facility concerned. The Aeronautical Information Manual contains specific details on hold-short operations and markings.

## RUNWAY DECLARED DISTANCE INFORMATION

TORA—Take-off Run Available. The length of runway declared available and suitable for the ground run of an aeroplane take-off.

TODA—Take-off Distance Available. The length of the take-off run available plus the length of the clearway, if provided.

ASDA—Accelerate-Stop Distance Available. The length of the take-off run available plus the length of the stopway, if provided.

LDA—Landing Distance Available. The length of runway which is declared available and suitable for the ground run of an aeroplane landing.

## 22 ARRESTING GEAR/SYSTEMS

Arresting gear is shown as it is located on the runway. The a-gear distance from the end of the appropriate runway (or into the overrun) is indicated in parentheses. A-Gear which has a bi-direction capability and can be utilized for emergency approach end engagement is indicated by a (B). The direction of engaging device is indicated by an arrow. Up to 15 minutes advance notice may be required for rigging A-Gear for approach and engagement. Airport listing may show availability of other than US Systems. This information is provided for emergency requirements only. Refer to current aircraft operating manuals for specific engagement weight and speed criteria based on aircraft structural restrictions and arresting system limitations.

Following is a list of current systems referenced in this publication identified by both Air Force and Navy terminology:

## BI-DIRECTIONAL CABLE (B)

| <u>TYPE</u> | <u>DESCRIPTION</u>  |
|-------------|---|
| BAK-9       | Rotary friction brake.  |
| BAK-12A     | Standard BAK-12 with 950 foot run out, 1-inch cable and 40,000 pound weight setting. Rotary friction brake. |
| BAK-12B     | Extended BAK-12 with 1200 foot run, 1¼ inch Cable and 50,000 pounds weight setting. Rotary friction brake.  |
| E28         | Rotary Hydraulic (Water Brake).   |
| M21         | Rotary Hydraulic (Water Brake) Mobile.  |

The following device is used in conjunction with some aircraft arresting systems:

|        |   |
|--------|---|
| BAK-14 | A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to five seconds to fully raise the cable.)             |
| H      | A device that raises a hook cable out of a slot in the runway surface and is remotely positioned for engagement by the tower on request. (In addition to personnel reaction time, the system requires up to one and one-half seconds to fully raise the cable.) |

## UNI-DIRECTIONAL CABLE

| <u>TYPE</u>  | <u>DESCRIPTION</u>   |
|--------------|--|
| MB60         | Textile brake—an emergency one-time use, modular braking system employing the tearing of specially woven textile straps to absorb the kinetic energy.  |
| E5/E5-1/E5-3 | Chain Type. At USN/USMC stations E-5 A-GEAR systems are rated, e.g., E-5 RATING-13R-1100 HW (DRY), 31L/R-1200 STD (WET). This rating is a function of the A-GEAR chain weight and length and is used to determine the maximum aircraft engaging speed. A dry rating applies to a stabilized surface (dry or wet) while a wet rating takes into account the amount (if any) of wet overrun that is not capable of withstanding the aircraft weight. These ratings are published under Military Service. |

## FOREIGN CABLE

| <u>TYPE</u> | <u>DESCRIPTION</u>             | <u>US EQUIVALENT</u> |
|-------------|--------------------------------|----------------------|
| 44B-3H      | Rotary Hydraulic (Water Brake) |                      |
| CHAG        | Chain                          | E-5                  |

## UNI-DIRECTIONAL BARRIER

| <u>TYPE</u> | <u>DESCRIPTION</u>  |
|-------------|---|
| MA-1A       | Web barrier between stanchions attached to a chain energy absorber.   |
| BAK-15      | Web barrier between stanchions attached to an energy absorber (water squeezer, rotary friction, chain). Designed for wing engagement. |

NOTE: Landing short of the runway threshold on a runway with a BAK-15 in the underrun is a significant hazard. The barrier in the down position still protrudes several inches above the underrun. Aircraft contact with the barrier short of the runway threshold can cause damage to the barrier and substantial damage to the aircraft.

## OTHER

| <u>TYPE</u> | <u>DESCRIPTION</u>  |
|-------------|---|
| EMAS        | Engineered Material Arresting System, located beyond the departure end of the runway, consisting of high energy absorbing materials which will crush under the weight of an aircraft. |

**23 MILITARY SERVICE**

Specific military services available at the airport are listed under this general heading. Remarks applicable to any military service are shown in the individual service listing.

**24 JET AIRCRAFT STARTING UNITS (JASU)**

The numeral preceding the type of unit indicates the number of units available. The absence of the numeral indicates ten or more units available. If the number of units is unknown, the number one will be shown. Absence of JASU designation indicates non-availability.

The following is a list of current JASU systems referenced in this publication:

USAF JASU (For variations in technical data, refer to T.O. 35-1-7.)

## ELECTRICAL STARTING UNITS:

|           |  |
|-----------|--|
| A/M32A-86 | AC: 115/200v, 3 phase, 90 kva, 0.8 pf, 4 wire<br>DC: 28v, 1500 amp, 72 kw (with TR pack)         |
| MC-1A     | AC: 115/208v, 400 cycle, 3 phase, 37.5 kva, 0.8 pf, 108 amp, 4 wire<br>DC: 28v, 500 amp, 14 kw   |
| MD-3      | AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire<br>DC: 28v, 1500 amp, 45 kw, split bus |
| MD-3A     | AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire<br>DC: 28v, 1500 amp, 45 kw, split bus |
| MD-3M     | AC: 115/208v, 400 cycle, 3 phase, 60 kva, 0.75 pf, 4 wire<br>DC: 28v, 500 amp, 15 kw             |

|  |   |
|--|---|
| MD-4   | AC: 120/208v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 175 amp, "WYE" neutral ground, 4 wire, 120v, 400 cycle, 3 phase, 62.5 kva, 0.8 pf, 303 amp, "DELTA" 3 wire, 120v, 400 cycle, 1 phase, 62.5 kva, 0.8 pf, 520 amp, 2 wire |
| AIR STARTING UNITS   |   |
| AM32-95  | 150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- 2 psia   |
| AM32A-95   | 150 +/- 5 lb/min @ 49 +/- 2 psia (35 +/- 2 psig)  |
| LASS   | 150 +/- 5 lb/min @ 49 +/- 2 psia  |
| MA-1A  | 82 lb/min (1123 cfm) at 130° air inlet temp, 45 psia (min) air outlet press   |
| MC-1   | 15 cfm, 3500 psia   |
| MC-1A  | 15 cfm, 3500 psia   |
| MC-2A  | 15 cfm, 200 psia  |
| MC-11  | 8,000 cu in cap, 4000 psig, 15 cfm  |
| COMBINED AIR AND ELECTRICAL STARTING UNITS:  |   |
| AGPU   | AC: 115/200v, 400 cycle, 3 phase, 30 kw gen<br>DC: 28v, 700 amp<br>AIR: 60 lb/min @ 40 psig @ sea level   |
| AM32A-60*  | AIR: 120 +/- 4 lb/min (1644 +/- 55 cfm) at 49 +/- 2 psia<br>AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire, 120v, 1 phase, 25 kva<br>DC: 28v, 500 amp, 15 kw   |
| AM32A-60A  | AIR: 150 +/- 5 lb/min (2055 +/- 68 cfm) at 51 +/- 2 psia<br>AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire<br>DC: 28v, 200 amp, 5.6 kw   |
| AM32A-60B*   | AIR: 130 lb/min, 50 psia<br>AC: 120/208v, 400 cycle, 3 phase, 75 kva, 0.75 pf, 4 wire<br>DC: 28v, 200 amp, 5.6 kw   |
| *NOTE: During combined air and electrical loads, the pneumatic circuitry takes preference and will limit the amount of electrical power available. |   |
| USN JASU   |   |
| ELECTRICAL STARTING UNITS:   |   |
| NC-8A/A1   | DC: 500 amp constant, 750 amp intermittent, 28v;<br>AC: 60 kva @ .8 pf, 115/200v, 3 phase, 400 Hz.  |
| NC-10A/A1/B/C  | DC: 750 amp constant, 1000 amp intermittent, 28v;<br>AC: 90 kva, 115/200v, 3 phase, 400 Hz.   |
| AIR STARTING UNITS:  |   |
| GTC-85/GTE-85  | 120 lbs/min @ 45 psi.   |
| MSU-200NAV/A/U47A-5  | 204 lbs/min @ 56 psia.  |
| WELLS AIR START SYSTEM   | 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. Simultaneous multiple start capability.   |
| COMBINED AIR AND ELECTRICAL STARTING UNITS:  |   |
| NCPP-105/RCPT  | 180 lbs/min @ 75 psi or 120 lbs/min @ 45 psi. 700 amp, 28v DC. 120/208v, 400 Hz AC, 30 kva.   |
| JASU (ARMY)  |   |
| 59B2-1B  | 28v, 7.5 kw, 280 amp.   |
| OTHER JASU   |   |
| ELECTRICAL STARTING UNITS (DND):   |   |
| CE12   | AC 115/200v, 140 kva, 400 Hz, 3 phase   |
| CE13   | AC 115/200v, 60 kva, 400 Hz, 3 phase  |
| CE14   | AC/DC 115/200v, 140 kva, 400 Hz, 3 phase, 28vDC, 1500 amp   |
| CE15   | DC 22-35v, 500 amp continuous 1100 amp intermittent   |
| CE16   | DC 22-35v, 500 amp continuous 1100 amp intermittent soft start  |
| AIR STARTING UNITS (DND):  |   |
| CA2  | ASA 45.5 psig, 116.4 lb/min   |
| COMBINED AIR AND ELECTRICAL STARTING UNITS (DND)   |   |
| CEA1   | AC 120/208v, 60 kva, 400 Hz, 3 phase DC 28v, 75 amp<br>AIR 112.5 lb/min, 47 psig  |
| ELECTRICAL STARTING UNITS (OTHER)  |   |
| C-26   | 28v 45kw 115-200v 15kw 380-800 Hz 1 phase 2 wire  |
| C-26-B, C-26-C   | 28v 45kw: Split Bus: 115-200v 15kw 380-800 Hz 1 phase 2 wire  |
| E3   | DC 28v/10kw   |
| AIR STARTING UNITS (OTHER):  |   |
| A4   | 40 psi/2 lb/sec (LPAS Mk12, Mk12L, Mk12A, Mk1, Mk2B)  |
| MA-1   | 150 Air HP, 115 lb/min 50 psia  |
| MA-2   | 250 Air HP, 150 lb/min 75 psia  |
| CARTRIDGE:   |   |
| MXU-4A   | USAF  |

**(25) FUEL—MILITARY**

Fuel available through US Military Base supply, DESC Into-Plane Contracts and/or reciprocal agreement is listed first and is followed by (Mil). At commercial airports where Into-Plane contracts are in place, the name of the refueling agent is shown. Military fuel should be used first if it is available. When military fuel cannot be obtained but Into-Plane contract fuel is available, Government aircraft must refuel with the contract fuel and applicable refueling agent to avoid any breach in contract terms and conditions. Fuel not available through the above is shown preceded by NC (no contract). When fuel is obtained from NC sources, local purchase procedures must be followed. The US Military Aircraft Identaplates DD Form 1896 (Jet Fuel), DD Form 1897 (Avgas) and AF Form 1245 (Avgas) are used at military installations only. The US Government Aviation Into-Plane Reimbursement (AIR) Card (currently issued by AVCARD) is the instrument to be used to obtain fuel under a DESC Into-Plane Contract and for NC purchases if the refueling agent at the commercial airport accepts the AVCARD. A current list of contract fuel locations is available online at [www.desc.dla.mil/Static/ProductsAndServices.asp](http://www.desc.dla.mil/Static/ProductsAndServices.asp); click on the Commercial Airports button.

See legend item 14 for fuel code and description.

**(26) SUPPORTING FLUIDS AND SYSTEMS—MILITARY****CODE**

|  |  |
|--|--|
| ADI  | Anti-Detonation Injection Fluid—Reciprocating Engine Aircraft.   |
| W  | Water Thrust Augmentation—Jet Aircraft.  |
| WAI  | Water-Alcohol Injection Type, Thrust Augmentation—Jet Aircraft.  |
| SP   | Single Point Refueling.  |
| PRESAIR  | Air Compressors rated 3,000 PSI or more.   |
| De-Ice   | Anti-icing/De-icing/Defrosting Fluid (MIL-A-8243).   |
| <b>OXYGEN:</b>   |  |
| LPOX   | Low pressure oxygen servicing.   |
| HPOX   | High pressure oxygen servicing.  |
| LHOX   | Low and high pressure oxygen servicing.  |
| LOX  | Liquid oxygen servicing.   |
| ORXB   | Oxygen replacement bottles. (Maintained primarily at Naval stations for use in acft where oxygen can be replenished only by replacement of cylinders.) |
| OX   | Indicates oxygen servicing when type of servicing is unknown.  |
| NOTE: Combinations of above items is used to indicate complete oxygen servicing available; |  |
| LHOXRB   | Low and high pressure oxygen servicing and replacement bottles;  |
| LPOXRB   | Low pressure oxygen replacement bottles only, etc.   |

NOTE: Aircraft will be serviced with oxygen procured under military specifications only. Aircraft will not be serviced with medical oxygen.

**NITROGEN:**

|       |   |
|-------|---|
| LPNIT | Low pressure nitrogen servicing.          |
| HPNIT | High pressure nitrogen servicing.         |
| LHNIT | Low and high pressure nitrogen servicing. |

**(27) OIL—MILITARY**

US AVIATION OILS (MIL SPECS):

| CODE      | GRADE, TYPE  |
|-----------|--|
| 0-113     | 1065, Reciprocating Engine Oil (MIL-L-6082)  |
| 0-117     | 1100, Reciprocating Engine Oil (MIL-L-6082)  |
| 0-117+    | 1100, 0-117 plus cyclohexanone (MIL-L-6082)  |
| 0-123     | 1065, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type III)  |
| 0-128     | 1100, (Dispersant), Reciprocating Engine Oil (MIL-L-22851 Type II)   |
| 0-132     | 1005, Jet Engine Oil (MIL-L-6081)  |
| 0-133     | 1010, Jet Engine Oil (MIL-L-6081)  |
| 0-147     | None, MIL-L-6085A Lubricating Oil, Instrument, Synthetic   |
| 0-148     | None, MIL-L-7808 (Synthetic Base) Turbine Engine Oil   |
| 0-149     | None, Aircraft Turbine Engine Synthetic, 7.5c St   |
| 0-155     | None, MIL-L-6086C, Aircraft, Medium Grade  |
| 0-156     | None, MIL-L-23699 (Synthetic Base), Turboprop and Turboshaft Engines   |
| JOAP/SOAP | Joint Oil Analysis Program. JOAP support is furnished during normal duty hours, other times on request. (JOAP and SOAP programs provide essentially the same service, JOAP is now the standard joint service supported program.) |

**(28) TRANSIENT ALERT (TRAN ALERT)—MILITARY**

Tran Alert service is considered to include all services required for normal aircraft turn-around, e.g., servicing (fuel, oil, oxygen, etc.), debriefing to determine requirements for maintenance, minor maintenance, inspection and parking assistance of transient aircraft. Drag chute backup, specialized maintenance, or extensive repairs will be provided within the capabilities and priorities of the base. Delays can be anticipated after normal duty hours/holidays/weekends regardless of the hours of transient maintenance operation. Pilots should not expect aircraft to be serviced for TURN-AROUNDS during time periods when servicing or maintenance manpower is not available. In the case of airports not operated exclusively by US military, the servicing indicated by the remarks will not always be available for US military

aircraft. When transient alert services are not shown, facilities are unknown. NO PRIORITY BASIS—means that transient alert services will be provided only after all the requirements for mission/tactical assigned aircraft have been accomplished.

## 29 AIRPORT REMARKS

The Attendance Schedule is the months, days and hours the airport is actually attended. Airport attendance does not mean watchman duties or telephone accessibility, but rather an attendant or operator on duty to provide at least minimum services (e.g., repairs, fuel, transportation).

Airport Remarks have been grouped in order of applicability. Airport remarks are limited to those items of information that are determined essential for operational use, i.e., conditions of a permanent or indefinite nature and conditions that will remain in effect for more than 30 days concerning aeronautical facilities, services, maintenance available, procedures or hazards, knowledge of which is essential for safe and efficient operation of aircraft. Information concerning permanent closing of a runway or taxiway will not be shown. A note "See Special Notices" shall be applied within this remarks section when a special notice applicable to the entry is contained in the Special Notices section of this publication.

Parachute Jumping indicates parachute jumping areas associated with the airport. See Parachute Jumping Area section of this publication for additional information.

Landing Fee indicates landing charges for private or non-revenue producing aircraft. In addition, fees may be charged for planes that remain over a couple of hours and buy no services, or at major airline terminals for all aircraft.

Note: Unless otherwise stated, remarks including runway ends refer to the runway's approach end.

## 30 MILITARY REMARKS

Military Remarks published at a joint Civil/Military facility are remarks that are applicable to the Military. At Military Facilities all remarks will be published under the heading Military Remarks. Remarks contained in this section may not be applicable to civil users. The first group of remarks is applicable to the primary operator of the airport. Remarks applicable to a tenant on the airport are shown preceded by the tenant organization, i.e., (A) (AF) (N) (ANG), etc. Military airports operate 24 hours unless otherwise specified. Airport operating hours are listed first (airport operating hours will only be listed if they are different than the airport attended hours or if the attended hours are unavailable) followed by pertinent remarks in order of applicability. Remarks will include information on restrictions, hazards, traffic pattern, noise abatement, customs/agriculture/immigration, and miscellaneous information applicable to the Military.

Type of restrictions:

CLOSED: When designated closed, the airport is restricted from use by all aircraft unless stated otherwise. Any closure applying to specific type of aircraft or operation will be so stated. USN/USMC/USAF airports are considered closed during non-operating hours. Closed airports may be utilized during an emergency provided there is a safe landing area.

OFFICIAL BUSINESS ONLY: The airfield is closed to all transient military aircraft for obtaining routine services such as fueling, passenger drop off or pickup, practice approaches, parking, etc. The airfield may be used by aircrews and aircraft if official government business (including civilian) must be conducted on or near the airfield and prior permission is received from the airfield manager.

AF OFFICIAL BUSINESS ONLY OR NAVY OFFICIAL BUSINESS ONLY: Indicates that the restriction applies only to service indicated.

PRIOR PERMISSION REQUIRED (PPR): Airport is closed to transient aircraft unless approval for operation is obtained from the appropriate commander through Chief, Airfield Management or Airfield Operations Officer. Official Business or PPR does not preclude the use of US Military airports as an alternate for IFR flights. If a non-US military airport is used as a weather alternate and requires a PPR, the PPR must be requested and confirmed before the flight departs. The purpose of PPR is to control volume and flow of traffic rather than to prohibit it. Prior permission is required for all aircraft requiring transient alert service outside the published transient alert duty hours. All aircraft carrying hazardous materials must obtain prior permission as outlined in AFJI 11-204, AR 95-27, OPNAVINST 3710.7.

Note: OFFICIAL BUSINESS ONLY AND PPR restrictions are not applicable to Special Air Mission (SAM) or Special Air Resource (SPAR) aircraft providing person or persons on board are designated Code 6 or higher as explained in AFJMAN 11-213, AR 95-11, OPNAVINST 3722-8J. Official Business Only or PPR do not preclude the use of the airport as an alternate for IFR flights.

## 31 WEATHER DATA SOURCES

Weather data sources will be listed alphabetically followed by their assigned frequencies and/or telephone number and hours of operation.

ASOS—Automated Surface Observing System. Reports the same as an AWOS-3 plus precipitation identification and intensity, and freezing rain occurrence (future enhancement).

AWOS—Automated Weather Observing System

AWOS-A—reports altimeter setting (all other information is advisory only).

AWOS-1—reports altimeter setting, wind data and usually temperature, dewpoint and density altitude.

AWOS-2—reports the same as AWOS-1 plus visibility.

AWOS-3—reports the same as AWOS-1 plus visibility and cloud/ceiling data.

See AIM, Basic Flight Information and ATC Procedures for detailed description of AWOS.

HIWAS—See RADIO AIDS TO NAVIGATION

LAWRS—Limited Aviation Weather Reporting Station where observers report cloud height, weather, obstructions to vision, temperature and dewpoint (in most cases), surface wind, altimeter and pertinent remarks.

LLWAS—indicates a Low Level Wind Shear Alert System consisting of a center field and several field perimeter anemometers. SAWRS—identifies airports that have a Supplemental Aviation Weather Reporting Station available to pilots for current weather information.

SWSL—Supplemental Weather Service Location providing current local weather information via radio and telephone.

TDWR—indicates airports that have Terminal Doppler Weather Radar.

WSP—indicates airports that have Weather System Processor.

When the automated weather source is broadcast over an associated airport NAVAID frequency (see NAVAID line), it shall be indicated by a bold ASOS, AWOS, or HIWAS followed by the frequency, identifier and phone number, if available.

## **32 COMMUNICATIONS**

Airport terminal control facilities and radio communications associated with the airport shall be shown. When the call sign is not the same as the airport name the call sign will be shown. Frequencies shall normally be shown in descending order with the primary frequency listed first. Frequencies will be listed, together with sectorization indicated by outbound radials, and hours of operation. Communications will be listed in sequence as follows:

Single Frequency Approach (SFA), Common Traffic Advisory Frequency (CTAF), Automatic Terminal Information Service (ATIS) and Aeronautical Advisory Stations (UNICOM) or (AUNICOM) along with their frequency is shown, where available, on the line following the heading "COMMUNICATIONS." When the CTAF and UNICOM frequencies are the same, the frequency will be shown as CTAF/UNICOM 122.8.

The FSS telephone nationwide is toll free 1-800-WX-BRIEF (1-800-992-7433). When the FSS is located on the field it will be indicated as "on arpt". Frequencies available at the FSS will follow in descending order. Remote Communications Outlet (RCO) providing service to the airport followed by the frequency and FSS RADIO name will be shown when available.

FSS's provide information on airport conditions, radio aids and other facilities, and process flight plans. Airport Advisory Service (AAS) is provided on the CTAF by FSS's for select non-tower airports or airports where the tower is not in operation. (See AIM, Para 4-1-9 Traffic Advisory Practices at Airports Without Operating Control Towers or AC 90-42C.)

Aviation weather briefing service is provided by FSS specialists. Flight and weather briefing services are also available by calling the telephone numbers listed.

Remote Communications Outlet (RCO)—An unmanned air/ground communications facility that is remotely controlled and provides UHF or VHF communications capability to extend the service range of an FSS.

Civil Communications Frequencies—Civil communications frequencies used in the FSS air/ground system are operated on 122.0, 122.2, 123.6; emergency 121.5; plus receive-only on 122.1.

- a. 122.0 is assigned as the Enroute Flight Advisory Service frequency at selected FSS RADIO outlets.
- b. 122.2 is assigned as a common enroute frequency.
- c. 123.6 is assigned as the airport advisory frequency at select non-tower locations. At airports with a tower, FSS may provide airport advisories on the tower frequency when tower is closed.
- d. 122.1 is the primary receive-only frequency at VOR's.
- e. Some FSS's are assigned 50 kHz frequencies in the 122-126 MHz band (eg. 122.45). Pilots using the FSS A/G system should refer to this directory or appropriate charts to determine frequencies available at the FSS or remote facility through which they wish to communicate.

Emergency frequency 121.5 and 243.0 are available at all Flight Service Stations, most Towers, Approach Control and RADAR facilities.

Frequencies published followed by the letter "T" or "R", indicate that the facility will only transmit or receive respectively on that frequency. All radio aids to navigation (NAVAID) frequencies are transmit only.

### **TERMINAL SERVICES**

SFA—Single Frequency Approach.

CTAF—A program designed to get all vehicles and aircraft at airports without an operating control tower on a common frequency.

ATIS—A continuous broadcast of recorded non-control information in selected terminal areas.

D-ATIS—Digital ATIS provides ATIS information in text form outside the standard reception range of conventional ATIS via landline & data link communications and voice message within range of existing transmitters.

AUNICOM—Automated UNICOM is a computerized, command response system that provides automated weather, radio check capability and airport advisory information selected from an automated menu by microphone clicks.

UNICOM—A non-government air/ground radio communications facility which may provide airport information.

PTD—Pilot to Dispatcher.

APP CON—Approach Control. The symbol **®** indicates radar approach control.

TOWER—Control tower.


GCA—Ground Control Approach System.

GND CON—Ground Control.

GCO—Ground Communication Outlet—An unstaffed, remotely controlled, ground/ground communications facility. Pilots at uncontrolled airports may contact ATC and FSS via VHF to a telephone connection to obtain an instrument clearance or close a VFR or IFR flight plan. They may also get an updated weather briefing prior to takeoff. Pilots will use four "key clicks" on the



VHF radio to contact the appropriate ATC facility or six “key clicks” to contact the FSS. The GCO system is intended to be used only on the ground.

DEP CON—Departure Control. The symbol  indicates radar departure control.

CLNC DEL—Clearance Delivery.

PRE TAXI CLNC—Pre taxi clearance.

VFR ADVSY SVC—VFR Advisory Service. Service provided by Non-Radar Approach Control.

Advisory Service for VFR aircraft (upon a workload basis) ctc APP CON.

COMD POST—Command Post followed by the operator call sign in parenthesis.

PMSV—Pilot-to-Metro Service call sign, frequency and hours of operation, when full service is other than continuous.

PMSV installations at which weather observation service is available shall be indicated, following the frequency and/or hours of operation as “Wx obsn svc 1900–0000Z+” or “other times” may be used when no specific time is given. PMSV facilities manned by forecasters are considered “Full Service”. PMSV facilities manned by weather observers are listed as “Limited Service”.

OPS—Operations followed by the operator call sign in parenthesis.

CON

RANGE

FLT FLW—Flight Following

MEDIVAC

NOTE: Communication frequencies followed by the letter “X” indicate frequency available on request.

### AIRSPACE

Information concerning Class B, C, and part-time D and E surface area airspace shall be published with effective times.

Class D and E surface area airspace that is continuous as established by Rulemaking Docket will not be shown.

CLASS B—Radar Sequencing and Separation Service for all aircraft in CLASS B airspace.

CLASS C—Separation between IFR and VFR aircraft and sequencing of VFR arrivals to the primary airport.

TRSA—Radar Sequencing and Separation Service for participating VFR Aircraft within a Terminal Radar Service Area.

Class C, D, and E airspace described in this publication is that airspace usually consisting of a 5 NM radius core surface area that begins at the surface and extends upward to an altitude above the airport elevation (charted in MSL for Class C and Class D). Class E surface airspace normally extends from the surface up to but not including the overlying controlled airspace.

When part-time Class C or Class D airspace defaults to Class E, the core surface area becomes Class E. This will be formatted as:

**AIRSPACE: CLASS C** svc “times” ctc **APP CON** other times CLASS E:

or

**AIRSPACE: CLASS D** svc “times” other times CLASS E.

When a part-time Class C, Class D or Class E surface area defaults to Class G, the core surface area becomes Class G up to, but not including, the overlying controlled airspace. Normally, the overlying controlled airspace is Class E airspace beginning at either 700’ or 1200’ AGL. This will be formatted as:

**AIRSPACE: CLASS C** svc “times” ctc **APP CON** other times CLASS G, with CLASS E 700’ (or 1200’) AGL & abv:

or

**AIRSPACE: CLASS D** svc “times” other times CLASS G with CLASS E 700’ (or 1200’) AGL & abv:

or

**AIRSPACE: CLASS E** svc “times” other times CLASS G with CLASS E 700’ (or 1200’) AGL & abv.

**NOTE: AIRSPACE SVC “TIMES” INCLUDE ALL ASSOCIATED ARRIVAL EXTENSIONS.** Surface area arrival extensions for instrument approach procedures become part of the primary core surface area. These extensions may be either Class D or Class E airspace and are effective concurrent with the times of the primary core surface area. For example, when a part-time Class C, Class D or Class E surface area defaults to Class G, the associated arrival extensions will default to Class G at the same time. When a part-time Class C or Class D surface area defaults to Class E, the arrival extensions will remain in effect as Class E airspace.

**NOTE: CLASS E AIRSPACE EXTENDING UPWARD FROM 700 FEET OR MORE ABOVE THE SURFACE, DESIGNATED IN CONJUNCTION WITH AN AIRPORT WITH AN APPROVED INSTRUMENT PROCEDURE.**

Class E 700’ AGL (shown as magenta vignette on sectional charts) and 1200’ AGL (blue vignette) areas are designated when necessary to provide controlled airspace for transitioning to/from the terminal and enroute environments. Unless otherwise specified, these 700’/1200’ AGL Class E airspace areas remain in effect continuously, regardless of airport operating hours or surface area status. These transition areas should not be confused with surface areas or arrival extensions.

(See Chapter 3, AIRSPACE, in the Aeronautical Information Manual for further details)



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The term VOR is, operationally, a general term covering the VHF omnidirectional bearing type of facility without regard to the fact that the power, the frequency protected service volume, the equipment configuration, and operational requirements may vary between facilities at different locations.

|               |  |
|---------------|--|
| AB _____      | Automatic Weather Broadcast.   |
| DF _____      | Direction Finding Service.   |
| DME _____     | UHF standard (TACAN compatible) distance measuring equipment.  |
| DME(Y) _____  | UHF standard (TACAN compatible) distance measuring equipment that require TACAN to be placed in the "Y" mode to receive DME. |
| GS _____      | Glide slope.   |
| H _____       | Non-directional radio beacon (homing), power 50 watts to less than 2,000 watts (50 NM at all altitudes).                     |
| HH _____      | Non-directional radio beacon (homing), power 2,000 watts or more (75 NM at all altitudes).                                   |
| H-SAB _____   | Non-directional radio beacons providing automatic transcribed weather service.   |
| ILS _____     | Instrument Landing System (voice, where available, on localizer channel).  |
| IM _____      | Inner marker.  |
| ISMLS _____   | Interim Standard Microwave Landing System.   |
| LDA _____     | Localizer Directional Aid.   |
| LMM _____     | Compass locator station when installed at middle marker site (15 NM at all altitudes).                                       |
| LOM _____     | Compass locator station when installed at outer marker site (15 NM at all altitudes).  |
| MH _____      | Non-directional radio beacon (homing) power less than 50 watts (25 NM at all altitudes).                                     |
| MLS _____     | Microwave Landing System.  |
| MM _____      | Middle marker.   |
| OM _____      | Outer marker.  |
| S _____       | Simultaneous range homing signal and/or voice.   |
| SABH _____    | Non-directional radio beacon not authorized for IFR or ATC. Provides automatic weather broadcasts.                           |
| SDF _____     | Simplified Direction Facility.   |
| TACAN _____   | UHF navigational facility-omnidirectional course and distance information.   |
| VOR _____     | VHF navigational facility-omnidirectional course only.   |
| VOR/DME _____ | Collocated VOR navigational facility and UHF standard distance measuring equipment.  |
| VORTAC _____  | Collocated VOR and TACAN navigational facilities.  |
| W _____       | Without voice on radio facility frequency.   |
| Z _____       | VHF station location marker at a LF radio facility.  |

## ILS FACILITY PERFORMANCE CLASSIFICATION CODES

Codes define the ability of an ILS to support autoland operations. The two portions of the code represent Official Category and farthest point along a Category I, II, or III approach that the Localizer meets Category III structure tolerances.

Official Category: I, II, or III; the lowest minima on published or unpublished procedures supported by the ILS.

Farthest point of satisfactory Category III Localizer performance for Category I, II, or III approaches: A – 4 NM prior to runway threshold, B – 3500 ft prior to runway threshold, C – glide angle dependent but generally 750–1000 ft prior to threshold, T – runway threshold, D – 3000 ft after runway threshold, and E – 2000 ft prior to stop end of runway.

ILS information is tabulated as indicated in the following sample:

ILS/DME 108.5 I-ORL Chan 22 Rwy 18. Class IIE. LOM HERNY NDB.

ILS Facility Performance  
Classification Code

## FREQUENCY PAIRING PLAN AND MLS CHANNELING

| MLS<br>CHANNEL | VHF<br>FREQUENCY | TACAN<br>CHANNEL | MLS<br>CHANNEL | VHF<br>FREQUENCY | TACAN<br>CHANNEL | MLS<br>CHANNEL | VHF<br>FREQUENCY | TACAN<br>CHANNEL |
|----------------|------------------|------------------|----------------|------------------|------------------|----------------|------------------|------------------|
| 500            | 108.10           | 18X              | 568            | 109.45           | 31Y              | 636            | 114.15           | 88Y              |
| 502            | 108.30           | 20X              | 570            | 109.55           | 32Y              | 638            | 114.25           | 89Y              |
| 504            | 108.50           | 22X              | 572            | 109.65           | 33Y              | 640            | 114.35           | 90Y              |
| 506            | 108.70           | 24X              | 574            | 109.75           | 34Y              | 642            | 114.45           | 91Y              |
| 508            | 108.90           | 26X              | 576            | 109.85           | 35Y              | 644            | 114.55           | 92Y              |
| 510            | 109.10           | 28X              | 578            | 109.95           | 36Y              | 646            | 114.65           | 93Y              |
| 512            | 109.30           | 30X              | 580            | 110.05           | 37Y              | 648            | 114.75           | 94Y              |
| 514            | 109.50           | 32X              | 582            | 110.15           | 38Y              | 650            | 114.85           | 95Y              |
| 516            | 109.70           | 34X              | 584            | 110.25           | 39Y              | 652            | 114.95           | 96Y              |
| 518            | 109.90           | 36X              | 586            | 110.35           | 40Y              | 654            | 115.05           | 97Y              |
| 520            | 110.10           | 38X              | 588            | 110.45           | 41Y              | 656            | 115.15           | 98Y              |
| 522            | 110.30           | 40X              | 590            | 110.55           | 42Y              | 658            | 115.25           | 99Y              |
| 524            | 110.50           | 42X              | 592            | 110.65           | 43Y              | 660            | 115.35           | 100Y             |
| 526            | 110.70           | 44X              | 594            | 110.75           | 44Y              | 662            | 115.45           | 101Y             |
| 528            | 110.90           | 46X              | 596            | 110.85           | 45Y              | 664            | 115.55           | 102Y             |
| 530            | 111.10           | 48X              | 598            | 110.95           | 46Y              | 666            | 115.65           | 103Y             |
| 532            | 111.30           | 50X              | 600            | 111.05           | 47Y              | 668            | 115.75           | 104Y             |
| 534            | 111.50           | 52X              | 602            | 111.15           | 48Y              | 670            | 115.85           | 105Y             |
| 536            | 111.70           | 54X              | 604            | 111.25           | 49Y              | 672            | 115.95           | 106Y             |
| 538            | 111.90           | 56X              | 606            | 111.35           | 50Y              | 674            | 116.05           | 107Y             |
| 540            | 108.05           | 17Y              | 608            | 111.45           | 51Y              | 676            | 116.15           | 108Y             |
| 542            | 108.15           | 18Y              | 610            | 111.55           | 52Y              | 678            | 116.25           | 109Y             |
| 544            | 108.25           | 19Y              | 612            | 111.65           | 53Y              | 680            | 116.35           | 110Y             |
| 546            | 108.35           | 20Y              | 614            | 111.75           | 54Y              | 682            | 116.45           | 111Y             |
| 548            | 108.45           | 21Y              | 616            | 111.85           | 55Y              | 684            | 116.55           | 112Y             |
| 550            | 108.55           | 22Y              | 618            | 111.95           | 56Y              | 686            | 116.65           | 113Y             |
| 552            | 108.65           | 23Y              | 620            | 113.35           | 80Y              | 688            | 116.75           | 114Y             |
| 554            | 108.75           | 24Y              | 622            | 113.45           | 81Y              | 690            | 116.85           | 115Y             |
| 556            | 108.85           | 25Y              | 624            | 113.55           | 82Y              | 692            | 116.95           | 116Y             |
| 558            | 108.95           | 26Y              | 626            | 113.65           | 83Y              | 694            | 117.05           | 117Y             |
| 560            | 109.05           | 27Y              | 628            | 113.75           | 84Y              | 696            | 117.15           | 118Y             |
| 562            | 109.15           | 28Y              | 630            | 113.85           | 85Y              | 698            | 117.25           | 119Y             |
| 564            | 109.25           | 29Y              | 632            | 113.95           | 86Y              |                |                  |                  |
| 566            | 109.35           | 30Y              | 634            | 114.05           | 87Y              |                |                  |                  |

## FREQUENCY PAIRING PLAN AND MLS CHANNELING

The following is a list of paired VOR/ILS VHF frequencies with TACAN channels and MLS channels.

| TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL | TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL | TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL |
|------------------|------------------|----------------|------------------|------------------|----------------|------------------|------------------|----------------|
| 2X               | 134.5            | -              | 19Y              | 108.25           | 544            | 25X              | 108.80           | -              |
| 2Y               | 134.55           | -              | 20X              | 108.30           | 502            | 25Y              | 108.85           | 556            |
| 11X              | 135.4            | -              | 20Y              | 108.35           | 546            | 26X              | 108.90           | 508            |
| 11Y              | 135.45           | -              | 21X              | 108.40           | -              | 26Y              | 108.95           | 558            |
| 12X              | 135.5            | -              | 21Y              | 108.45           | 548            | 27X              | 109.00           | -              |
| 12Y              | 135.55           | -              | 22X              | 108.50           | 504            | 27Y              | 109.05           | 560            |
| 17X              | 108.00           | -              | 22Y              | 108.55           | 550            | 28X              | 109.10           | 510            |
| 17Y              | 108.05           | 540            | 23X              | 108.60           | -              | 28Y              | 109.15           | 562            |
| 18X              | 108.10           | 500            | 23Y              | 108.65           | 552            | 29X              | 109.20           | -              |
| 18Y              | 108.15           | 542            | 24X              | 108.70           | 506            | 29Y              | 109.25           | 564            |
| 19X              | 108.20           | -              | 24Y              | 108.75           | 554            | 30X              | 109.30           | 512            |

| TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL | TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL | TACAN<br>CHANNEL | VHF<br>FREQUENCY | MLS<br>CHANNEL |
|------------------|------------------|----------------|------------------|------------------|----------------|------------------|------------------|----------------|
| 30Y              | 109.35           | 566            | 63X              | 133.60           | -              | 95Y              | 114.85           | 650            |
| 31X              | 109.40           | -              | 63Y              | 133.65           | -              | 96X              | 114.90           | -              |
| 31Y              | 109.45           | 568            | 64X              | 133.70           | -              | 96Y              | 114.95           | 652            |
| 32X              | 109.50           | 514            | 64Y              | 133.75           | -              | 97X              | 115.00           | -              |
| 32Y              | 109.55           | 570            | 65X              | 133.80           | -              | 97Y              | 115.05           | 654            |
| 33X              | 109.60           | -              | 65Y              | 133.85           | -              | 98X              | 115.10           | -              |
| 33Y              | 109.65           | 572            | 66X              | 133.90           | -              | 98Y              | 115.15           | 656            |
| 34X              | 109.70           | 516            | 66Y              | 133.95           | -              | 99X              | 115.20           | -              |
| 34Y              | 109.75           | 574            | 67X              | 134.00           | -              | 99Y              | 115.25           | 658            |
| 35X              | 109.80           | -              | 67Y              | 134.05           | -              | 100X             | 115.30           | -              |
| 35Y              | 109.85           | 576            | 68X              | 134.10           | -              | 100Y             | 115.35           | 660            |
| 36X              | 109.90           | 518            | 68Y              | 134.15           | -              | 101X             | 115.40           | -              |
| 36Y              | 109.95           | 578            | 69X              | 134.20           | -              | 101Y             | 115.45           | 662            |
| 37X              | 110.00           | -              | 69Y              | 134.25           | -              | 102X             | 115.50           | -              |
| 37Y              | 110.05           | 580            | 70X              | 112.30           | -              | 102Y             | 115.55           | 664            |
| 38X              | 110.10           | 520            | 70Y              | 112.35           | -              | 103X             | 115.60           | -              |
| 38Y              | 110.15           | 582            | 71X              | 112.40           | -              | 103Y             | 115.65           | 666            |
| 39X              | 110.20           | -              | 71Y              | 112.45           | -              | 104X             | 115.70           | -              |
| 39Y              | 110.25           | 584            | 72X              | 112.50           | -              | 104Y             | 115.75           | 668            |
| 40X              | 110.30           | 522            | 72Y              | 112.55           | -              | 105X             | 115.80           | -              |
| 40Y              | 110.35           | 586            | 73X              | 112.60           | -              | 105Y             | 115.85           | 670            |
| 41X              | 110.40           | -              | 73Y              | 112.65           | -              | 106X             | 115.90           | -              |
| 41Y              | 110.45           | 588            | 74X              | 112.70           | -              | 106Y             | 115.95           | 672            |
| 42X              | 110.50           | 524            | 74Y              | 112.75           | -              | 107X             | 116.00           | -              |
| 42Y              | 110.55           | 590            | 75X              | 112.80           | -              | 107Y             | 116.05           | 674            |
| 43X              | 110.60           | -              | 75Y              | 112.85           | -              | 108X             | 116.10           | -              |
| 43Y              | 110.65           | 592            | 76X              | 112.90           | -              | 108Y             | 116.15           | 676            |
| 44X              | 110.70           | 526            | 76Y              | 112.95           | -              | 109X             | 116.20           | -              |
| 44Y              | 110.75           | 594            | 77X              | 113.00           | -              | 109Y             | 116.25           | 678            |
| 45X              | 110.80           | -              | 77Y              | 113.05           | -              | 110X             | 116.30           | -              |
| 45Y              | 110.85           | 596            | 78X              | 113.10           | -              | 110Y             | 116.35           | 680            |
| 46X              | 110.90           | 528            | 78Y              | 113.15           | -              | 111X             | 116.40           | -              |
| 46Y              | 110.95           | 598            | 79X              | 113.20           | -              | 111Y             | 116.45           | 682            |
| 47X              | 111.00           | -              | 79Y              | 113.25           | -              | 112X             | 116.50           | -              |
| 47Y              | 111.05           | 600            | 80X              | 113.30           | -              | 112Y             | 116.55           | 684            |
| 48X              | 111.10           | 530            | 80Y              | 113.35           | 620            | 113X             | 116.60           | -              |
| 48Y              | 111.15           | 602            | 81X              | 113.40           | -              | 113Y             | 116.65           | 686            |
| 49X              | 111.20           | -              | 81Y              | 113.45           | 622            | 114X             | 116.70           | -              |
| 49Y              | 111.25           | 604            | 82X              | 113.50           | -              | 114Y             | 116.75           | 688            |
| 50X              | 111.30           | 532            | 82Y              | 113.55           | 624            | 115X             | 116.80           | -              |
| 50Y              | 111.35           | 606            | 83X              | 113.60           | -              | 115Y             | 116.85           | 690            |
| 51X              | 111.40           | -              | 83Y              | 113.65           | 626            | 116X             | 116.90           | -              |
| 51Y              | 111.45           | 608            | 84X              | 113.70           | -              | 116Y             | 116.95           | 692            |
| 52X              | 111.50           | 534            | 84Y              | 113.75           | 628            | 117X             | 117.00           | -              |
| 52Y              | 111.55           | 610            | 85X              | 113.80           | -              | 117Y             | 117.05           | 694            |
| 53X              | 111.60           | -              | 85Y              | 113.85           | 630            | 118X             | 117.10           | -              |
| 53Y              | 111.65           | 612            | 86X              | 113.90           | -              | 118Y             | 117.15           | 696            |
| 54X              | 111.70           | 536            | 86Y              | 113.95           | 632            | 119X             | 117.20           | -              |
| 54Y              | 111.75           | 614            | 87X              | 114.00           | -              | 119Y             | 117.25           | 698            |
| 55X              | 111.80           | -              | 87Y              | 114.05           | 634            | 120X             | 117.30           | -              |
| 55Y              | 111.85           | 616            | 88X              | 114.10           | -              | 120Y             | 117.35           | -              |
| 56X              | 111.90           | 538            | 88Y              | 114.15           | 636            | 121X             | 117.40           | -              |
| 56Y              | 111.95           | 618            | 89X              | 114.20           | -              | 121Y             | 117.45           | -              |
| 57X              | 112.00           | -              | 89Y              | 114.25           | 638            | 122X             | 117.50           | -              |
| 57Y              | 112.05           | -              | 90X              | 114.30           | -              | 122Y             | 117.55           | -              |
| 58X              | 112.10           | -              | 90Y              | 114.35           | 640            | 123X             | 117.60           | -              |
| 58Y              | 112.15           | -              | 91X              | 114.40           | -              | 123Y             | 117.65           | -              |
| 59X              | 112.20           | -              | 91Y              | 114.45           | 642            | 124X             | 117.70           | -              |
| 59Y              | 112.25           | -              | 92X              | 114.50           | -              | 124Y             | 117.75           | -              |
| 60X              | 133.30           | -              | 92Y              | 114.55           | 644            | 125X             | 117.80           | -              |
| 60Y              | 133.35           | -              | 93X              | 114.60           | -              | 125Y             | 117.85           | -              |
| 61X              | 133.40           | -              | 93Y              | 114.65           | 646            | 126X             | 117.90           | -              |
| 61Y              | 133.45           | -              | 94X              | 114.70           | -              | 126Y             | 117.95           | -              |
| 62X              | 133.50           | -              | 94Y              | 114.75           | 648            |                  |                  |                |
| 62Y              | 133.55           | -              | 95X              | 114.80           | -              |                  |                  |                |

**(35) COMM/NAV/WEATHER REMARKS:**

These remarks consist of pertinent information affecting the current status of communications, NAVAIDs and weather.

**ADAMS CO LEGION FLD** (See FRIENDSHIP ADAMS)

**ALEXANDER FLD SOUTH WOOD CO** (See WISCONSIN RAPIDS)

**AMERON** N45°16.89' W92°22.28' NOTAM FILE GRB.

GREEN BAY

NDB (MHW) 278 AHH at Amery Muni. Unusable byd 20 NM.

A

**AMERY MUNI** (AHH) 2 S UTC-6(-5DT) N45°16.87' W92°22.52'

GREEN BAY

1088 B S4 FUEL 100LL, JET A NOTAM FILE GRB

L-141, A

RWY 18-36: H4001X75 (ASPH) S-12.5 MIRL

IAP

RWY 18: REIL. VASI(V2L)—GA 3.0° TCH 24'. Trees.

RWY 36: REIL. VASI(V2L)—GA 3.0° TCH 24'. Road.

**AIRPORT REMARKS:** Unattended. Radio controlled acft activity invof arpt. 100' crane 1500' SE of AER 36 dalgt hrs only. Rwy 36 safety area very rough. MIRL Rwy 18-36 preset low to increase ints and ACTIVATE VASI Rwy 18 and Rwy 36 and REIL Rwy 18 and Rwy 36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RICE LAKE RCO 122.3 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 125.3

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RPD.

RICE LAKE (T) VORW/DME 110.0 RPD Chan 37 N45°24.91' W91°46.68' 252° 26.5 NM to fld. 1092/1E.

OTS indef.

AMERON NDB (MHW) 278 AHH N45°16.89' W92°22.28' at fld. NOTAM FILE GRB. Unusable byd 20 NM.

**ANTIGO** N45°09.52' W89°06.83' NOTAM FILE AIG.

GREEN BAY

NDB (MHW) 347 AIG at Langlade Co. Unusable beyond 18 NM.

L-14J

## ANTIGO

**LANGLADE CO** (AIG) 2 NE UTC-6(-5DT) N45°09.25' W89°06.64'

GREEN BAY

1521 B S2 FUEL 100LL, JET A NOTAM FILE AIG

L-14J

RWY 16-34: H4001X75 (ASPH-AFSC) S-21 MIRL

IAP

RWY 16: REIL. PAPI(P2R)—GA 3.0° TCH 26'. Trees.

RWY 34: REIL. PAPI(P2L)—GA 3.0° TCH 39'. Trees.

RWY 08-26: H3400X75 (ASPH-AFSC) S-12.5 MIRL

RWY 08: PAPI(P2L)—GA 3.0° TCH 25'. Trees.

RWY 26: PAPI(P2R)—GA 3.0° TCH 28'. Road.

**AIRPORT REMARKS:** Attended May-Sep 1400-0200Z†, Oct-Apr 1400-2300Z†. MIRL Rwy 16-34 preset on low ints; to increase ints and ACTIVATE MIRL Rwy 08-26; REIL Rws 16 and 34; PAPI Rwy 08; Rwy 26 and Rwy 16 and Rwy 34—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.075 (715) 627-2869.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

® MINNEAPOLIS CENTER APP/DEP CON 124.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE AUW.

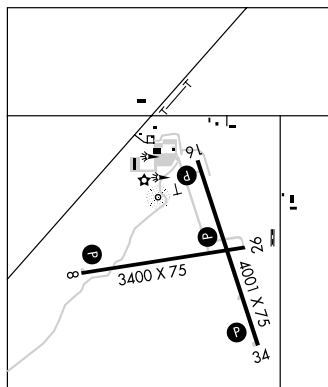
WAUSAU (L) VORTACW 111.6 AUW Chan 53 N44°50.81'

W89°35.19' 046° 27.4 NM to fld. 1205/2E.

ANTIGO NDB (MHW) 347 AIG N45°09.52' W89°06.83' at fld.

NOTAM FILE AIG.

Unusable beyond 18 NM.



**APPLETON****OUTAGAMIE CO RGNL** (ATW) 3 W UTC-6(-5DT) N44°15.49' W88°31.15'918 B S4 FUEL 100LL, JET A1 +, MOGAS OX 1, 2 Class I, ARFF Index B  
NOTAM FILE ATW**RWY 03-21:** H8002X150 (CONC-GRVD) S-75, D-160, ST-175, DT-320 HIRL**RWY 03:** MALSR. PAPI(P4L)—GA 3.0° TCH 47'. Tree.**RWY 21:** REIL. PAPI(P4L)—GA 3.0° TCH 47'. Tree.**RWY 11-29:** H6501X150 (CONC-GRVD). S-75, D-160, ST-175, DT-320 HIRL 0.9% up NW**RWY 11:** REIL. VASI(V4L)—GA 3.0° TCH 35'. Tree.**RWY 29:** MALSR. PAPI(P4L)—GA 3.0° TCH 61'.**LAND AND HOLD SHORT OPERATIONS**

| LANDING       | HOLD SHORT POINT | DIST AVBL |
|---------------|------------------|-----------|
| <b>RWY 03</b> | 11-29            | 3300      |
| <b>RWY 21</b> | 11-29            | 4100      |
| <b>RWY 29</b> | 03-21            | 3400      |

**RUNWAY DECLARED DISTANCE INFORMATION****RWY 03:** TORA 8002 TODA 8002 ASDA 8002 LDA 8002**RWY 11:** TORA 6501 TODA 6501 ASDA 6501 LDA 6501**RWY 21:** TORA 8002 TODA 8002 ASDA 8002 LDA 8002**RWY 29:** TORA 6501 TODA 6501 ASDA 6501 LDA 6501**AIRPORT REMARKS:** Attended continuously. Birds and migratory waterfowl on and in/ovf arpt. Snow removal ops in progress winter months.

Vehicle operators will be monitoring CTAF; acft ldg/dep Appleton should use CTAF when twr clsd. Rwy 03 touchdown RVR avbl. When twr clsd HIRL Rwy 03-21 preset on low ints, to increase ints and ACTIVATE HIRL Rwy 11-29; MALSR Rwy 03 and Rwy 29; REIL Rwy 11 and Rwy 21—CTAF. PAPI Rwy 03, Rwy 21 and Rwy 29 and VASI Rwy 11 opr 24 hrs. Rwy 21 PAPI rstd byd 8.5° right of course.

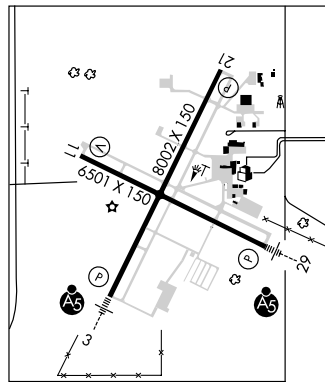
**WEATHER DATA SOURCES:** AWOS-3 (920) 832-2597. LAWRS.**COMMUNICATIONS:** CTAF 119.6 ATIS 127.15

UNICOM 122.95

① **GREEN BAY APP/DEP CON** 126.3 (1130-0530Z) ② **MINNEAPOLIS CENTER APP/DEP CON** 126.3 (0530-1130Z)

**APPLETON TOWER** 119.6 (1130-0500Z) **GND CON** 121.7**AIRSPACE:** CLASS D svc 1130-0500Z other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSH.**OSHKOSH (L) VORTAC** 111.8 OSH Chan 55 N43°59.43' W88°33.36' 004° 16.1 NM to fld. 780/2E.**KOOKY NDB (MHW/LOM)** 407 AQ N44°12.95' W88°23.94' 298° 5.8 NM to fld. NOTAM FILE ATW.

Unmonitored.

**GAMIE NDB (LOM)** 230 AT N44°09.75' W88°35.10' 028° 6.4 NM to fld.**ILS/DME** 109.1 I-ATW Chan 28 Rwy 03. Class 1C. LOM GAMIE NDB.**ILS/DME** 109.7 I-AQZ Chan 34 Rwy 29. Class IT. LOM KOOKY NDB **ILS/DME** unmonitored.**COMM/NAV/WEATHER REMARKS:** Rwy 03. LOC/GS unmonitored when twr clsd. LOM unmonitored.**ARBOR VITAE** N45°55.57' W89°43.76' NOTAM FILE ARV.**NDB (MHW)** 221 ARV at Lakeland/Noble F. Lee Meml Fld.**GREEN BAY**  
L-141**ARSHA** N45°37.69' W89°37.13' NOTAM FILE RHI.**NDB (LOM)** 272 RH 087° 6.4 NM to Rhinelander-Oneida Co.**GREEN BAY****ASHLAND** N46°32.96' W90°55.04' NOTAM FILE ASX.**(T) VORW/DME** 110.2 ASX Chan 39 at John F. Kennedy Meml.

820/2E. Unmonitored 0000-1200Z.

**RCD** 122.25 (GREEN BAY RADIO)**GREEN BAY**  
L-141

**ASHLAND****JOHN F KENNEDY MEML** (ASX) 2 SW UTC-6(-5DT) N46°32.91' W90°55.14'**GREEN BAY**827 B **FUEL** 100LL, JET A, A1+ NOTAM FILE ASX

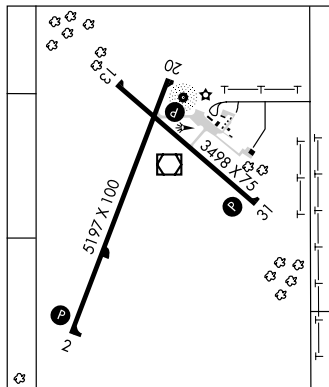
H-2I, L-14I

**RWY 02-20:** H5197X100 (ASPH) S-42, D-52 MIRL

IAP

**RWY 02:** REIL. PAPI(P4L)—GA 3.0° TCH 41'. Trees.**RWY 20:** PAPI(P4L)—GA 3.0° TCH 34'. Trees.**RWY 13-31:** H3498X75 (ASPH) S-40, D-50 MIRL 0.4% up NW**RWY 13:** Trees. **RWY 31:** PAPI(P2L)—GA 3.0° TCH 37'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2200Z†. For svc after hrs call 715-292-7070. Jet A1+ PPR ctc arpt manager 715-682-7070, after hrs call 715-292-7070. 24 hr self serve 100LL. Deer and other wildlife on and invof arpt. Heavy bird activity spring and summer months. Ultralight activity on and invof arpt. Snow removal ops winter months. Acft over 4000 lbs must stop or park on conc if able. Terminal building open May-Oct 1200-0200Z† and Nov-Apr 1400-2200Z†. ACTIVATE MIRL Rwy 13-31 and Rwy 02-20, REIL Rwy 02 and PAPI Rwy 02, Rwy 20 and Rwy 31-CTAF.

**WEATHER DATA SOURCES:** ASOS 126.775 (715) 682-5541.**COMMUNICATIONS:** CTAF/UNICOM 122.8**ASHLAND RCO** 122.25 (GREEN BAY RADIO)Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 126.45**RADIO AIDS TO NAVIGATION:** NOTAM FILE ASX.**ASHLAND (T) VORW/DME** 110.2 ASX Chan 39 N46°32.96' W90°55.04' at fld. 820/2E. Unmonitored 0000-1200Z†.**KENNEDY NDB (MHW)** 254 ENY N46°33.18' W90°54.87' at fld. Unmonitored 0000-1200Z†.**ILS/DME** 109.3 I-ASX Chan 30 Rwy 02. LOC only.**AUSTIN STRAUBEL INTL.** (See GREEN BAY)**BADGER** N43°07.01' W88°17.06' NOTAM FILE MKE.**CHICAGO**(H) **VORTACW** 116.4 BAE Chan 111 153° 5 NM to Waukesha Co. 1080/2E. HIWAS.

H-5E, L-28H

**BARABOO WISCONSIN DELLS** (DLL) 3 NW UTC-6(-5DT) N43°31.32' W89°46.25'**CHICAGO**979 B **FUEL** 100LL, JET A, MOGAS TPA-1979(1000) NOTAM FILE DLL

L-28G

**RWY 01-19:** H4800X75 (ASPH) S-19, D-30 HIRL

IAP

**RWY 01:** REIL. Trees.**RWY 19:** REIL. PAPI(P2L)—GA 3.0 TCH 26. Trees.**RWY 14-32:** 2708X100 (TURF)**RWY 14:** Pole.**RWY 32:** Trees.

**AIRPORT REMARKS:** Attended May-Sep 1400-0200Z†, Oct-Apr 1400-2300Z†. Rwy 14-32 not plowed and CLOSED Nov 15 thru Apr 15. Confirm rwy open with arpt manager 608-356-2270. Birds on and invof arpt in fall. HIRL Rwy 01-19 preset on low ints; to increase ints and ACTIVATE REIL Rwy 01 and Rwy 19-CTAF. Rwy 14-32 ends marked by yellow and black A-frames.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (608) 356-1071**COMMUNICATIONS:** CTAF/UNICOM 123.05**DELLS RCO** 122.1R 117.0T (GREEN BAY RADIO)Ⓡ **MADISON APP/DEP CON** 135.45 (1200-0500Z†)Ⓡ **CHICAGO CENTER APP/DEP CON** 133.3 (0500-1200Z†)**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLL.**DELLS (H) VORTAC** 117.0 DLL Chan 117 N43°33.05' W89°45.82' 187° 1.8 NM to fld. 1020/3E.**ILS/DME** 109.15 I-DLL Chan 28(Y) Rwy 01.**BARRON MUNI** (9Y7) 0 NE UTC-6(-5DT) N45°24.45' W91°50.06'**GREEN BAY**

1113 TPA-2113(1000) NOTAM FILE GRB

**RWY 09-27:** 2010X260 (TURF)**RWY 09:** Tree.**RWY 27:** Road.

**AIRPORT REMARKS:** Attended irregularly. For svcs call arpt manager 715-635-6735 or 715-790-3071. Rwy 09-27 N half plowed; S half skis only. Rwy 09-27 ends marked by yellow cones.

**COMMUNICATIONS:** CTAF 122.9**RICE LAKE RCO** 122.3 (GREEN BAY RADIO)**BAYYE** N44°40.59' W89°38.88' NOTAM FILE AUW.**GREEN BAY****NDB (LOM)** 351 PH 353° 6.1 NM to Central Wisconsin.



**BELOIT** (44C) 3 E UTC-6(-5DT) N42°29.87' W88°58.06' CHICAGO  
 817 B FUEL 100LL TPA-1517(700) NOTAM FILE GRB L-28H  
 RWY 07-25: H3300X50 (ASPH) S-12.5 LIRL(NSTD) 0.4% up NE IAP  
 RWY 25: Thld dsplcd 350'. Road.  
**AIRPORT REMARKS:** Attended dawn-dusk. Glider ops on and invof arpt. ACTIVATE NSTD LIRL Rwy 07-25-CTAF.  
 Rotating bcn ops dusk-0500Z; other hrs by req, call arpt manager 608-365-2998. Rwy 07-25 NSTD LIRL  
 100' wide; 50' left and right of rwy centerline. Rwy 07 thld marking NSTD located 92' NE of pavement end.  
**COMMUNICATIONS:** CTAF/UNICOM 122.7  
 (R) **ROCKFORD APP/DEP CON 121.0**  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE FEP.  
**JANESVILLE (L) VOR/DME 114.3 JVL** Chan 90 N42°33.48' W89°06.32' 118° 7.1 NM to fld. 931/3E.  
 HIWAS

**BIG DOCTOR** N45°49.28' W92°21.99' NOTAM FILE GRB GREEN BAY  
 NDB (MHW) 203 BXR at Burnett Co. VFR only.

**BIG FOOT AIRFIELD** (See WALWORTH)

**BLACKHAWK AIRFIELD** (See MADISON)

**BLACK RIVER FALLS AREA** (BCK) 3 S UTC-6(-5DT) N44°15.05' W90°51.32' GREEN BAY  
 836 B FUEL 100LL, JET A NOTAM FILE GRB L-28G  
 RWY 08-26: H4600X75 (ASPH) S-12 MIRL 0.3% up E IAP  
 RWY 08: REIL. PAPI(P2L)-GA 3.0° TCH 27'. Trees. **RWY 26:** PAPI(P2L)-GA 3.3° TCH 27'. Trees.  
**AIRPORT REMARKS:** Unattended. Fuel 24 hrs self serve. Ultralight activity on and invof arpt. Wildlife, birds on and invof  
 arpt. MIRL Rwy 08-26 preset on low ints; to ACTIVATE higher ints and PAPI Rwy 08 and Rwy 26 and REIL Rwy  
 08-CTAF.  
**COMMUNICATIONS:** CTAF 122.9  
 RCO 122.5 (GREEN BAY RADIO)  
 (R) **MINNEAPOLIS CENTER APP/DEP CON 128.6**  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE PNM.  
**NODINE (H) VORTAC 117.9 ODI** Chan 126 N43°54.74' W91°28.05' 051° 33.4 NM to fld. 1282/1E.  
 NDB (MHW) 362 BCK N44°15.28' W90°50.94' at fld. NOTAM FILE GRB. NDB unusable byd 15 NM.

**BOLEY FLD** (See TOMAH)

**BONG** N46°41.48' W92°06.21' NOTAM FILE SUW. GREEN BAY  
 NDB (MHW) 260 SUW at Richard I Bong. L-141

**BOSCobel** (OVS) 2 NE UTC-6(-5DT) N43°09.65' W90°40.44' CHICAGO  
 673 B S3 FUEL 100LL TPA-1503(830) NOTAM FILE OVS H-50, L-28G  
 RWY 07-25: H5000X75 (ASPH) S-12.5 D-30 MIRL IAP  
 RWY 07: REIL. PAPI(P2L)-GA 3.0° TCH 38'. Trees. **RWY 25:** REIL. PAPI(P2L)-GA 3.0° TCH 40'. Trees.  
 RWY 02-20: H3658X58 (ASPH) S-12.5 MIRL  
 RWY 02: Trees. **RWY 20:** Trees.  
**AIRPORT REMARKS:** Attended dawn-dusk. MIRL Rwy 07-25 preset on low ints, to increase ints and ACTIVATE MIRL  
 Rwy 02-20 and REIL Rwy 07-25-CTAF.  
**WEATHER DATA SOURCES:** ASOS 126.775 (608) 375-2712.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8  
 (R) **CHICAGO CENTER APP/DEP CON 133.3**  
 GCO 121.725 (FLIGHT SERVICES)  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNR.  
**LONE ROCK (L) VOR/DME 112.8 LNR** Chan 75 N43°17.66' W90°07.99' 252° 25 NM to fld. 1184/OE.  
 HIWAS.

**BOULDER JUNCTION** (BDJ) 2 N UTC-6(-5DT) N46°08.25' W89°38.76' GREEN BAY  
 1666 TPA-2666(1000) NOTAM FILE GRB  
 RWY 05-23: 3170X165 (TURF)  
 RWY 05: Tree. **RWY 23:** Trees.  
 RWY 16-34: 2540X160 (TURF)  
 RWY 16: Road. **RWY 34:** Trees  
**AIRPORT REMARKS:** Unattended May-Nov. Arpt CLOSED Dec-Apr. Rwy 05 all rwys marked with yellow A-frames.  
**COMMUNICATIONS:** CTAF 122.9

**BOYCEVILLE MUNI** (3T3) 0 SE UTC-6(-5DT) N45°02.64' W92°01.22'

GREEN BAY

967 B S3 **FUEL** 100LL TPA-1967(1000) NOTAM FILE GRB

L-141

**RWY 08-26:** H3300X60 (ASPH) MIRL 0.5% up E

IAP

**RWY 08:** PAPI(P2L)—GA 3.0° TCH 28'. Tree.**RWY 26:** REIL. PAPI(P2L)—GA 3.0° TCH 23'.

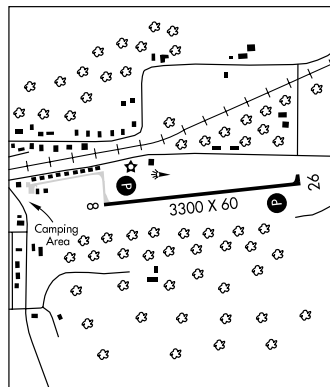
**AIRPORT REMARKS:** Unattended. Fuel svc unavbl. Crane 160' 2.1 NM east 1300-2359Z daily. Deer on and in vof arpt, primarily after dusk. **ACTIVATE** MIRL Rwy 08-26, PAPI Rwy 08 and 26 and REIL Rwy 26-122.8.

**COMMUNICATIONS:** CTAF/UNICOM 122.8.

MINNEAPOLIS CENTER APP/DEP CON 125.3

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EAU.

**EAU CLAIRE (L) VORTACW** 112.9 EAU Chan 76 N44°53.86' W91°28.71' 287° 24.7 NM to fld. 804/4E. **HIWAS.**

**BRENNAND** (See NEENAH)**BRODHEAD** (C37) 2 S UTC-6(-5DT) N42°35.50' W89°22.51'

CHICAGO

793 NOTAM FILE GRB

**RWY 09-27:** 2430X155 (TURF) LIRL**RWY 09:** Tree. **RWY 27:** Trees.**RWY 03-21:** 1480X100 (TURF)**RWY 03:** Trees. **RWY 21:** Road.**RWY 15-33:** 1380X100 (TURF)**RWY 15:** Trees. **RWY 33:** Trees.

**AIRPORT REMARKS:** Unattended. Rwy not plowed winters, open to ski acft. Rwy 09-27 east 1200' soft and rough. **ACTIVATE** LIRL Rwy 09-27—CTAF. Rwy 09-27; Rwy 15-33, and Rwy 03-21 marked by orange and yellow half barrels.

**COMMUNICATIONS:** CTAF 122.9**BROOKFIELD****CAPITOL** (Ø2C) 3 E UTC-6(-5DT) N43°05.25' W88°10.67'

CHICAGO

850 B S4 **FUEL** 100LL, MOGAS TPA-1850 (1000) NOTAM FILE GRB

L-28H, A

**RWY 03-21:** H3501X44 (ASPH) MIRL (NSTD)**RWY 03:** TRCV(TRIL). Thld dspcd 500'. Road.**RWY 21:** REIL (NSTD). TRCV(TRIL). Thld dspcd 195'. Trees.**RWY 09-27:** 3395X100 (TURF)**RWY 09:** Tree. **RWY 27:** Trees.**RWY 18-36:** 1600X80 (TURF)**RWY 18:** Brush. **RWY 36:** Tree.

**AIRPORT REMARKS:** Attended Apr-Oct 1400Z-dusk, Nov-Mar 1400-0000Z. Rwy 03 and 36 acft ops cannot see Rwy 27 acft ops. Be alert: constant moving ops on and in vof rwy and adjacent areas. Intensive flight training powered acft. Rwy 09-27 and Rwy 18-36 open for ski equipped acft 1 Dec thru 15 Apr. Rwy 09-27 and 18-36 not sanded or plowed. Confirm conditions and snow removal for Rwy 03-21 with arpt manager 262-781-4213. Rwy 21 NSTD REIL, strobes mounted on standard edge lighting poles. Rwy 03-21 NSTD MIRL OTS indef. **ACTIVATE** NSTD MIRL Rwy 03-21 and VASI Rwy 03 and 21—CTAF. Rwy 03-21 NSTD MIRL; Rwy 03 first 500' unlighted. Rwy 09-27 and Rwy 18-36 ends marked with orange and white A-frames.

**COMMUNICATIONS:** CTAF/UNICOM 122.7**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE

**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 109° 5 NM to fld. 1080/2E. **HIWAS.**

**BURBUN** N42°41.36' W88°18.11' NOTAM FILE GRB.

CHICAGO

(T) VORW/DME 114.5 BUU Chan 92 at Burlington Muni. 780/1W. **AWOS-3.**

L-28H, A

**BURLINGTON MUNI** (BUU) 1 NW UTC-6(-5DT) N42°41.44' W88°18.28' **CHICAGO**  
 779 B S4 FUEL 100LL, JET A OX 4 NOTAM FILE BUU L-28H, A  
**RWY 11-29:** H4300X75 (ASPH) S-20 MIRL IAP  
**RWY 11:** REIL. PAPI(P2L)—GA 3.15° TCH 33'. Tree.  
**RWY 29:** REIL. VASI(V2L)—GA 3.0° TCH 36'. Tree. Rgt tfc.  
**RWY 01-19:** 2477X130 (TURF)  
**RWY 01:** Trees. **RWY 19:** Road. Rgt tfc.  
**AIRPORT REMARKS:** Attended 1400Z±-dusk. Fuel 24 hr self svc. Waterfowl on and invof arpt. Tfc departing Rwy 11 avoid overflight of city. ACTIVATE MIRL Rwy 11-29; VASI Rwy 29 and PAPI Rwy 11 and REIL Rwy 11 and 29—CTAF. Asph twy 30' wide, except W 700' 35' wide. Rwy 01-19 marked with yellow/black wooden panels.  
**WEATHER DATA SOURCES:** AWOS-3 BUU 114.5 (262) 757-0907.  
**COMMUNICATIONS:** CTAF/UNICOM 123.05  
 (R) **MILWAUKEE APP/DEP CON** 125.35  
**GCO** 121.725 (FLIGHT SERVICES)  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.  
**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 180° 25.6 NM to fld. 1080/2E.  
**HIWAS.**  
**BURBUN (T) VORW/DME** 114.5 BUU Chan 92 N42°41.36' W88°18.11' at fld. 780/1W. AWOS-3. NOTAM FILE GRB.

### BURNETT CO (See SIREN)

**CABLE UNION** (3CU) 2 SE UTC-6(-5DT) N46°11.66' W91°14.79' **GREEN BAY**  
 1360 B FUEL 100LL NOTAM FILE GRB L-141  
**RWY 16-34:** H3709X75 (ASPH) S-28 LIRL 0.4% up S IAP  
**RWY 16:** REIL. Tree. **RWY 34:** Trees.  
**RWY 08-26:** 2840X200 (TURF)  
**RWY 08:** Thld dsplcd 400'. Trees. **RWY 26:** Thld dsplcd 400'. Trees.  
**AIRPORT REMARKS:** Unattended. For arpt manager after hrs call 715-794-2493. Rwy 08-26 CLOSED Nov 21-May 1. Rwy 08-26 marked with orange/white wooden A-frames. No heating units to start acft.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8  
**HAYWARD RCO** 122.1R 113.4T (GREEN BAY RADIO)  
**MINNEAPOLIS CENTER APP/DEP CON** 126.45  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE HYR.  
**HAYWARD (L) VOR/DME** 113.4 HYR Chan 81 N46°01.14' W91°26.78' 035° 13.4 NM to fld. 1207/3E.  
 VOR portion unusable blo 10000'.  
**SEELEY NDB (MHW)** 344 SLY N46°06.73' W91°23.08' 048° 7.6 NM to fld.  
 NOTAM FILE GRB. NDB unusable byd 15 NM.

**CALIN** N44°34.15' W90°09.06' NOTAM FILE MFI. **GREEN BAY**  
**NDB (LOM)** 266 DU 338° 4.4 NM to Marshfield Muni.

**CAMP LAKE** (49C) 1 W UTC-6(-5DT) N42°32.00' W88°09.51' **CHICAGO**  
 755 S4 TPA-1355(600) NOTAM FILE GRB  
**RWY 18-36:** 2250X75 (TURF)  
**RWY 18:** Building. **RWY 36:** Trees. Rgt tfc.  
**AIRPORT REMARKS:** Attended Mon-Sat 1500-0400Z±. Ultralight activity on and invof arpt. Deer activity on and invof arpt. Arpt not plowed; confirm conditions with arpt manager 262-889-8187.  
**COMMUNICATIONS:** CTAF 122.9

### CAPITOL (See BROOKFIELD)

**CAPPY** N42°50.38' W87°54.78' NOTAM FILE MKE. **CHICAGO**  
**NDB (LOM)** 410 MK 008° 6.5 NM to General Mitchell Intl.

### CARTER (See PULASKI)

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**CASSVILLE MUNI** (C74) 1 SE UTC-6(-5DT) N42°42.25' W90°57.88' CHICAGO  
L-286  
 627 NOTAM FILE GRB  
**RWY 11-29:** H3000X50 (ASPH) S-21, D-40 LIRL  
**RWY 11:** Tree. Rgt tfc. **RWY 29:** Thld dsplcd 600'. Road.  
**AIRPORT REMARKS:** Unattended. For winter condition and snow removal call arpt manager 608-725-5895. 1350' X20'  
 twy W end Rwy 11.  
**COMMUNICATIONS:** CTAF 122.9  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE DBQ.  
**DUBUQUE (H) VORTACW** 115.8 DBQ Chan 105 N42°24.09' W90°42.54' 324° 21.4 NM to fld. 1051/4E.

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**CENTRAL CO** (See IOLA)

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**CENTRAL WISCONSIN** (See MOSINEE)

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**CHETEK MUNI-SOUTHWORTH** (Y23) 1 SE UTC-6(-5DT) N45°18.37' W91°38.17' GREEN BAY  
L-14I  
IAP  
 1055 B S2 FUEL 80, 100LL TPA-2055(1000) NOTAM FILE GRB  
**RWY 17-35:** H3400X60 (ASPH) MIRL  
**RWY 17:** REIL. PAPI(P2L)—GA 4.0° TCH 22'. Thld dsplcd 600'. Trees.  
**RWY 35:** REIL. PAPI (P2L)—GA 3.0° TCH 29'. Road.  
**RWY 07-25:** 1100X70 (TURF) 0.4% up E  
**RWY 07:** Trees. **RWY 25:** Trees.  
**AIRPORT REMARKS:** Unattended. 24 hr self svc fuel. Rwy 07-25 not plowed; Rwy CLOSED Nov 15 thru Apr 15. Rwy 17-35 may not be plowed for 24 to 48 hrs after heavy snow fall or drifting snow. Rwy 07-25 thlds marked by yellow cones. MIRL Rwy 17-35 preset on low ints, to increase ints and ACTIVATE PAPI and REIL Rwy 17 and Rwy 35—CTAF.  
**COMMUNICATIONS:** CTAF 122.9  
**RICE LAKE RCO** 122.3 (GREEN BAY RADIO)  
**MINNEAPOLIS CENTER APP/DEP CON** 125.3  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE RPD.  
**RICE LAKE (T) VORW/DME** 110.0 RPD Chan 37 N45°24.91' W91°46.68' 136° 8.9 NM to fld. 1092/1E. OTS indef.

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**CHILTON**

**FLYING FEATHERS** (11Y) 2 NW UTC-6(5DT) N44°03.67' W88°11.70' GREEN BAY  
 940 NOTAM FILE GRB Not insp.  
**RWY 18-36:** 1000X60 (TURF)  
**RWY 09-27:** 500X20 (TURF)  
**AIRPORT REMARKS:** Unattended.  
**COMMUNICATIONS:** CTAF 122.9

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**CHIPPEWA VALLEY RGNL** (See EAU CLAIRE)

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**CINDY GUNTLY MEML** (See FRANKSVILLE)

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**CLINTONVILLE MUNI** (CLI) 1 SE UTC-6(-5DT) N44°36.80' W88°43.84'

GREEN BAY

822 B S4 FUEL 100LL, JET A NOTAM FILE CLI

L-14J, 31A

RWY 14-32: H4600X75 (ASPH) S-30, D-55 MIRL

IAP

RWY 14: Trees.

RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 26'. Tree.

RWY 04-22: H3300X100 (ASPH) S-40, D-70, ST-89

MIRL 0.4% up SW

RWY 04: Trees.

RWY 22: Road.

RWY 09-27: 2000X170 (TURF)

RWY 09: Tree.

RWY 27: Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†. Fuel: 24 hr self svc. Rwy 09-27 CLOSED from 1 Dec to 15 Apr, other times confirm condition with arpt manager at 715-823-7690. Deer, fox and birds on and in/ov arpt. 200' crane 6000' NW apch end Rwy 14. ACTIVATE MIRL Rwy 04-22 and Rwy 14-32 and REIL Rwy 32 and PAPI Rwy 32—CTAF. Rwy 09-27 thlds marked with white cones.

**WEATHER DATA SOURCES:** AWOS-3 120.675 (715) 823-7691.**COMMUNICATIONS:** CTAF/UNICOM 122.8

① GREEN BAY APP/DEP CON 126.3 (1130-0530Z†)

① MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z†)

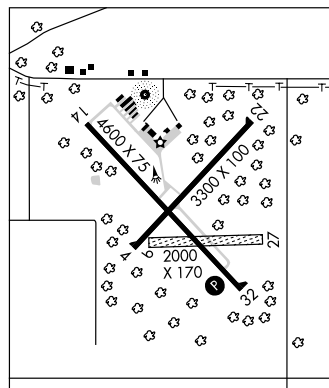
GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.

GREEN BAY (H) VORTACW 115.5 GRB Chan 102 N44°33.31' W88°11.69' 278° 23.2 NM to fld. 767/1E.

HIWAS.

NDB (MHW) 209 CLI N44°37.13' W88°43.99' at fld. NOTAM FILE CLI.

**CODEE** N42°33.62' W88°01.73' NOTAM FILE ENW.

CHICAGO

NDB(LOM) 389 EN 066° 4.9 NM to Kenosha Rgnl.

**CORNELL MUNI** (2H3) 2 E UTC-6(-5DT) N45°09.93' W91°06.34'

GREEN BAY

1154 B S2 FUEL MOGAS NOTAM FILE GRB

RWY 09-27: H2420X45 (ASPH) LIRL (NSTD)

RWY 9: Road.

RWY 27: Tree.

**AIRPORT REMARKS:** Attended 1400-2300Z†. Confirm winter conditions and snow removal with arpt manager 715-239-3716. East 100' in poor condition; pavement cracked; heaving and grass growing in cracks. ACTIVATE NSTD LIRL Rwy 09-27 and rotating bcn—UNICOM. LIRL OTS indef.

**COMMUNICATIONS:** CTAF/UNICOM 122.8**CRANDON MUNI** (Y55) 3 SW UTC-6(-5DT) N45°31.00' W88°56.01'

GREEN BAY

1646 B NOTAM FILE GRB

L-14J

RWY 11-29: H3100X75 (ASPH) S-12 LIRL

RWY 11: Trees.

RWY 29: Road.

RWY 01-19: 2730X100 (TURF)

RWY 01: Road.

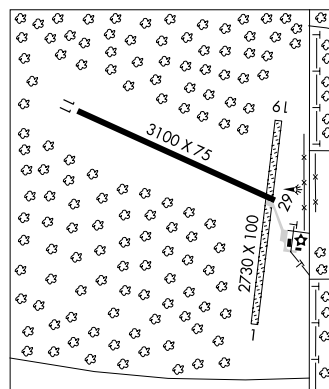
RWY 19: Trees.

**AIRPORT REMARKS:** Unattended. Occasional deer on and in/ov arpt. LIRL Rwy 11-29 preset on low ints; to increase ints—CTAF. Rwy 01-19 marked by yellow cones.

**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

RHINELANDER (L) VORTAC 109.2 RHI Chan 29 N45°38.03'

W89°27.47' 105° 23.2 NM to fld. 1590/2E. HIWAS.



**CRIVITZ MUNI** (3D1) 3 SW UTC-6(-5DT) N45°12.85' W88°04.37'

GREEN BAY

731 B NOTAM FILE GRB

RWY 18-36: H2620X60 (ASPH) S-12

RWY 18: Road. RWY 36: Road.

RWY 09-27: 1270X80 (TURF) LIRL

RWY 09: Trees. RWY 27: Trees.

**AIRPORT REMARKS:** Unattended. Deer on and invof arpt. Rwy 09-27 not plowed. Confirm snow removal for Rwy 18-36 with arpt manager 715-854-7075. ACTIVATE LIRL Rwy 09-27 and rotating bcn-5 clicks on 123.0.

**COMMUNICATIONS:** CTAF/UNICOM 122.8**CUMBERLAND****CUMBERLAND MUNI** (UBE) 3 SE UTC-6(-5DT) N45°30.36' W91°58.87'

GREEN BAY

1241 B S4 FUEL 100LL, MOGAS NOTAM FILE GRB

L-14I

RWY 09-27: H4050X75 (ASPH) MIRL

IAP

RWY 09: VASI(V2L)—GA 3.0° TCH 26'. Road.

RWY 27: REIL. VASI(V2L)—GA 3.0° TCH 29'. Road.

RWY 18-36: 2000X120 (TURF)

RWY 18: Road. RWY 36: Tree.

**AIRPORT REMARKS:** Unattended. 24 hr fuel avbl. Rwy 18-36 not plowed winter months. Rwy 18-36 marked with yellow cones. MIRL Rwy 09-27 preset on low ints to increase ints and ACTIVATE REIL Rwy 27—CTAF. VASI Rwy 27 opr 24 hrs.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RICE LAKE RCO 122.3 (GREEN BAY RADIO)

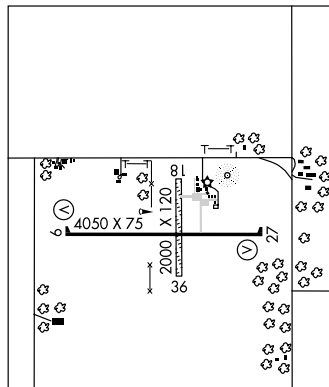
GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RPD.

RICE LAKE (T) VORW/DME 110.0 RPD Chan 37 N45°24.91'

W91°46.68' 301° 10.2 NM to fld. 1092/1E. OTS indef.

NDB (MHW) 375 UBE N45°30.55' W91°58.60' at fld. NOTAM FILE GRB. Unmonitored.

**SILVER LAKE SPB** (WN2) 5 NW UTC-6(-5DT) N45°35.07' W91°55.55'

GREEN BAY

1248 NOTAM FILE GRB

Not insp.

**WATERWAY 18W-36W:** 5000X200 (WATER)**SEAPLANE REMARKS:** Unattended. No services avbl. Silver Lake may be frozen from Nov-Apr.**COMMUNICATIONS:** CTAF 122.9**DANCI** N44°45.62' W89°47.35' NOTAM FILE CWA.

GREEN BAY

NDB (LOM) 275 CW 079° 5.3 NM to Central Wisconsin.

**DANE CO RGNL-TRUAX FLD** (See MADISON)

**DELAVAN****LAKE LAWN** (C59) 2 E UTC-6(-5DT) N42°38.05' W88°36.07'

CHICAGO

981 B NOTAM FILE GRB

L-28H

**RWY 18-36:** H4423X80 (ASPH) MIRL 0.3% up N

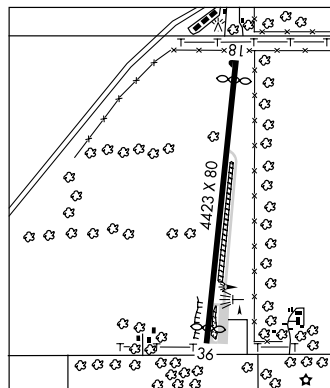
IAP

**RWY 18:** REIL. Thld dsplcd 320'. Tree.**RWY 36:** Thld dsplcd 300'. Tree.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED for ngt ops. Rwy 18-36 CLOSED 15 Nov-31 Mar. Rwy 18-36 numerous large cracks and vegetation growing through pavement entire length. Low wing acft avoid south twy, 25' from twy centerline to 3' fence. Rwy 18-36 MIRL OTS indef. Rwy 18 REIL OTS indef.

**COMMUNICATIONS:** CTAF 122.9Ⓡ **ROCKFORD APP/DEP CON 121.0****RADIO AIDS TO NAVIGATION:** NOTAM FILE FEP.**JANESVILLE (L) VOR/DME 114.3 JVL** Chan 90 N42°33.48'W89°06.32' 075° 22.8 NM to fld. 931/3E. **HIWAS.**

**NDB (MHW) 404 LVV** N42°41.93' W88°35.59' 185° 3.9 NM to fld. NOTAM FILE GRB. OTS indef.

**DELLS** N43°33.05' W89°45.82' NOTAM FILE DLL.

CHICAGO

(H) **VORTAC 117.0 DLL** Chan 117 187° 1.8 NM to Baraboo Wisconsin Dells. 1020/3E.

H-21, 5D, L-28G

**RCO 122.1R 117.0T** (GREEN BAY RADIO)**DEPRE** N44°23.91' W88°07.97' NOTAM FILE GRB.

CHICAGO

**NDB (MHW/LOM) 332 SG** 004° 5.2 NM to Austin Straubel Intl. LOM unmonitored.

L-31A

**DODGE CO** (See JUNEAU)**DOOR CO CHERRYLAND** (See STURGEON BAY)**DOUGY** N45°50.07' W89°43.83' NOTAM FILE ARV.

GREEN BAY

**NDB (MHW/LOM) 236 DO** 001° 5.6 NM to Lakeland/Noble F. Lee Meml Fld. NDB unmonitored.

L-14J

**DRUMMOND****EAU CLAIRE LAKES** (5G4) 10 W UTC-6(-5DT) N46°20.93' W91°29.90'

GREEN BAY

1214 NOTAM FILE GRB

**RWY 18-36:** 2290X70 (TURF)**RWY 18:** Trees. **RWY 36:** Fence.

**AIRPORT REMARKS:** Attended daltg hrs. Arpt CLOSED to wheeled acft Nov 15 thru Mar 31. 62' antenna 150' right and 340' from thld Rwy 36. 10' depression 40'-400' from Rwy 36 thld 125' left. Rwy 18 end marked with tires. Rwy 36 end marked with silver/yellow A-frames, Rwy 18-36 marked with white reflectors along both edges.

**COMMUNICATIONS:** CTAF 122.9

**EAGLE RIVER UNION** (EGV) 0 NW UTC-6(-5DT) N45°55.94' W89°16.10'

GREEN BAY

1642 B S4 FUEL 100LL, JET A NOTAM FILE EGV

H-2J, L-14J

RWY 04-22: H500X76 (ASPH) S-12.5 MIRL

IAP

RWY 04: REIL. PAPI(P4L). Trees. RWY 22: REIL. PAPI(P4L)—GA 3.0° TCH 34'. Pole.

RWY 13-31: H3400X60 (ASPH) MIRL

RWY 13: Tree. RWY 31: Tree.

**AIRPORT REMARKS:** Attended Jun-Aug 1500-0200Z†, Sep-May 1500-2300Z†. For attendant other hrs call 715-477-1548/479-4105/891-0987/891-5612. Ultralight activity on and invof arpt. REIL Rwy 22 OTS indef.

ACTIVATE MIRL Rwy 04-22 and MIRL Rwy 13-31 and REIL Rwy 04 and Rwy 22 and twy lghts—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (715) 479-1465.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RHINELANDER RCO 122.1R 109.2T (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 133.65

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

RHINELANDER (L) VORTAC 109.2 RHI Chan 29 N45°38.03' W89°27.47' 022° 19.6 NM to fld. 1590/02E.

HIWAS.

NDB (MHW) 341 EGV N45°55.96' W89°15.79' at fld. NOTAM FILE EGV.

ILS/DME 110.7 I-LBJ Chan 44 Rwy 04. LOC only. DME unusable byd 20° left of course.

HELIPAD H1: 60X60 (CONC)

**HELIPORT REMARKS:** Helipad H1 perimeter lghts.**EAST TROY MUNI** (57C) 2 NE UTC-6(-5DT) N42°47.83' W88°22.36'

CHICAGO

860 B S4 FUEL 100LL, JET A, MOGAS NOTAM FILE GRB

L-28H, A

RWY 08-26: H3900X75 (ASPH) S-12 MIRL 0.4% up E

IAP

RWY 08: REIL. PAPI(P2L)—GA 3.0° TCH 43'. Road.

RWY 26: REIL. Trees.

RWY 18-36: 2446X75 (TURF) 0.4% up N

RWY 18: Tree. RWY 36: Road.

**AIRPORT REMARKS:** Attended 1430Z†-dusk. After hrs svc call 262-642-2755 or 262-745-8706. Fuel avbl 24 hrs with credit card. Parachute Jumping. Rwy 18-36 be alert: not plowed 15 Oct-15 May. Ultralights activity on and invof arpt. Noise abatement procedures in effect; contact arpt manager at 262-642-4374. MIRL Rwy 08-26 is preset on low ints; to ACTIVATE higher ints and REIL Rwy 08 and 26 and PAPI Rwy 08—CTAF. Rwy 18-36 thlds marked with wooden A-frames in an L layout painted orange and white.**COMMUNICATIONS:** CTAF/UNICOM 123.0

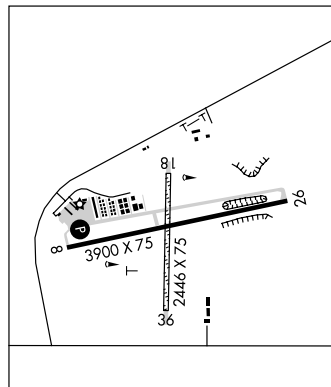
® MILWAUKEE APP/DEP CON 125.35

GCO 121.725 (MILWAUKEE CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE

BADGER (H) VORTACW 116.4 BAE Chan 111 N43°07.01'

W88°17.06' 190° 19.6 NM to fld. 1080/2E. HIWAS.

**EAU CLAIRE** N44°53.86' W91°28.71' NOTAM FILE EAU.

GREEN BAY

(L) VORTACW 112.9 EAU Chan 76 183° 2NM to Chippewa Valley Rgnl. 804/4E.

H-2I, L-14I

HIWAS. DME unusable byd 30NM below 3500'.

RCO 123.6 122.65 (GREEN BAY RADIO)



**EAU CLAIRE****CHIPPEWA VALLEY RGNL**

(EAU) 3 N UTC-6(-5DT) N44°51.95' W91°29.06'  
 913 B S4 FUEL 100LL, JET A OX 4 TPA-1913(1000) Class I, ARFF Index A  
 NOTAM FILE EAU

**GREEN BAY**  
 H-21, L-141  
 IAP, AD

**RWY 04-22:** H8101X150 (CONC-TRTD-RFSC) S-100, D-180, ST-175, DT-320 HIRL

**RWY 04:** REIL. PAPI(P4L)—GA 3.0° TCH 44'. Thld dspcd 801'.

Road.

**RWY 22:** MALSR. PAPI(P4L)—GA 3.0° TCH 50'. 0.6% down.

**RWY 14-32:** H5000X100 (ASPH-CONC) S-40, D-60 MIRL

**RWY 14:** REIL. PAPI(P4L)—GA 3.0° TCH 43'. Trees.

**RWY 32:** PAPI(P4L)—GA 4.0° TCH 70'. Tree.

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 04:** TORA-8101 TODA-8101 ASDA-8101 LDA-7301

**RWY 22:** TORA-7301 TODA-7301 ASDA-7301 LDA-7301

**AIRPORT REMARKS:** Attended 1300-0300Z†. Arpt condition unmonitored 0500-1000Z†. ARFF not avbl 24 hrs. PPR for unscheduled air carrier ops with more than 9 passenger seats; ctc arpt manager 715-839-6241. Air carrier ops with more than 9 passenger seats not authorized in excess of 15 minutes before or after scheduled arrival/dep times without PPR with arpt manager and confirmation ARFF is avbl prior to ldg or tkf. HIRL Rwy 04-22 preset on low ints, to incr ints and ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14, Rwy 32, and Rwy 22, REIL Rwy 04 and Rwy 14, MALSR Rwy 22—CTAF. PAPI Rwy 04 on continuously.

**WEATHER DATA SOURCES:** ASOS 119.675 (715) 832-7990. HIWAS 112.9 EAU.

**COMMUNICATIONS:** CTAF 118.575 UNICOM 122.95

**EAU CLAIRE RCO** 123.6 122.65 (GREEN BAY RADIO)

**MINNEAPOLIS CENTER APP CON** 125.3

**TOWER** 118.575 (1130-0230Z†) **GND CON** 120.925

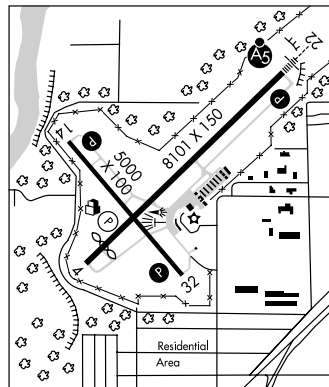
**AIRSPACE:** CLASS D svc 1130-0230Z† other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EAU.

**EAU CLAIRE (L) VORTACW** 112.9 EAU Chan 76 N44°53.86' W91°28.71' 183° 1.9 NM to fld. 804/4E. HIWAS

**MAGGS NDB (LOM)** 239 EA N44°56.69' W91°22.42' 224° 6.7 NM to fld. Unmonitored.

**ILS/DME** 109.5 I-EAU Chan 32 Rwy 22. LOM MAGGS NDB. BC unusable byd 10 NM blo 2500'.

**EAU CLAIRE LAKES** (See DRUMMOND)**EDGERTON**

**JANA** (58C) 3 N UTC-6(-5DT) N42°52.37' W89°04.54'

**CHICAGO**

842 FUEL 100LL NOTAM FILE GRB

**RWY 18-36:** 2305X135 (TURF) LIRL (NSTD)

**RWY 18:** Tree. **RWY 36:** Brush.

**AIRPORT REMARKS:** Attended irregularly. Parachute Jumping. Fee for acft ldg at arpt without gas purchase (maintenance fee). For NSTD LIRL Rwy 18-36 call 608-884-3403/3521. Rwy 18-36 NSTD LIRL with reflectors; orange reflectors indicating last 1000' of rwy both directions. Rwy 18-36 marked by pairs of red metal A-frames; ends of stopways marked with 3 red metal A-frames on centerline.

**COMMUNICATIONS:** CTAF 122.9

**ELROY MUNI** (60C) 2 S UTC-6(-5DT) N43°42.38' W90°15.46'

**CHICAGO**

944 TPA-1744(800) NOTAM FILE GRB

**RWY 06-24:** 3085X100 (GRVL-TURF) LIRL (NSTD)

**RWY 06:** Trees. **RWY 24:** Tree. Rgt tfc.

**AIRPORT REMARKS:** Unattended. Rwy 06-24 2550' by 34' GRVL superimposed on turf rwy; surface patchy and rough.

Tall bluffs and trees located on both sides of rwy. Rwy 06-24 NSTD LIRL thld lgts, all green lenses.

**COMMUNICATIONS:** CTAF 122.9

**EPHRAIM—FISH CREEK** (3D2) 1 SW UTC-6(-5DT) N45°08.12' W87°11.15' **GREEN BAY**  
 773 B S2 FUEL 100LL NOTAM FILE GRB **L-31B**  
 RWY 14-32: H2700X60 (ASPH) S-12.5 MIRL 0.5% up NE **IAP**  
 RWY 14: PAPI(P2L)—GA 3.5° TCH 24'. Trees. RWY 32: PAPI(P2L)—GA 3.0° TCH 25'. Trees.  
 RWY 01-19: 1980X80 (TURF)  
 RWY 01: Trees. RWY 19: Trees.  
**AIRPORT REMARKS:** Attended on call. For fuel Mon-Fri 1600-2100Z± call 920-868-1714. Other hrs call 920-495-0775/493-1714. Rwy 01-19 slopes immediately down to South—cannot see one end from the other. Rwy 14-32 400' turf twy on NE end. Rwy 01-19 ends and edges marked with yellow barrels. ACTIVATE MIRL Rwy 14-32, PAPI Rwy 14 and Rwy 32—CTAF.  
**COMMUNICATIONS:** CTAF/UNICOM 123.0  
**GREEN BAY APP/DEP CON** 119.5 (1130-0530Z±) **MINNEAPOLIS CENTER APP/DEP CON** 127.65 (0530-1130Z±)  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MNM.  
**MENOMINEE (L) VOR DME** 109.6 MNM CHAN 83 N45°10.81' W87°38.83' 098° 19.8 NM to fld. 650/00E.

**FALLS** N43°46.13' W87°50.93' NOTAM FILE SBM. **CHICAGO**  
 (L) VOR/DME 110.0 FAH Chan 37 at Sheboygan Co Meml. 740/2W. ASOS **L-28H**  
 VOR unusable 018°-045° byd 12 NM and 046°-017° byd 31 NM blo 3000'.  
 DME unusable 320°-340° byd 25 NM blo 3000'.  
**RCO** 122.1R 110.0T (GREEN BAY RADIO)

**FAMIS** N44°26.43' W88°14.38' NOTAM FILE GRB. **GREEN BAY**  
**NDB (LOM)** 356 GR 063° 5.4 NM to Austin Straubel Intl. Unmonitored.

**FICHY** N44°45.36' W87°26.95' NOTAM FILE SUE. **GREEN BAY**  
**NDB (LOM)** 224 II 016° 5.4 NM to Door Co Cherryland. Unmonitored.

**FOND DU LAC CO** (FLD) 1 W UTC-6(-5DT) N43°46.27' W88°29.31' **CHICAGO**  
 808 B S4 FUEL 100LL, JET A1 TPA—1808(1000) NOTAM FILE FLD **H-2I, L-28H**  
 RWY 18-36: H5941X100 (ASPH) D-60 HIRL **IAP**  
 RWY 18: REIL. PAPI(P4L)—GA 3.0° TCH 48'. Trees. Rgt tfc.  
 RWY 36: MALSR. PAPI(P4L)—GA 3.0° TCH 33'. Trees.  
 RWY 09-27: H3602X75 (ASPH) S-22 MIRL 0.6% up W  
 RWY 09: Trees. Rgt tfc. RWY 27: Road.  
**AIRPORT REMARKS:** Attended 1400Z±-dusk. For attendant after hrs call 920-922-6000. Rwy 36 is for left tfc only. HIRL Rwy 18-36 preset on low ints; to incr ints and ACTIVATE MIRL Rwy 09-27, REIL Rwy 18; PAPI Rwy 18 and Rwy 36 and MALSR Rwy 36—CTAF.  
**WEATHER DATA SOURCES:** ASOS 134.0 (920) 922-4444.  
**COMMUNICATIONS:** CTAF/UNICOM 123.05  
**RCO** 122.5 (GREEN BAY RADIO)  
**MILWAUKEE APP/DEP CON** 127.0  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSH.  
**OSHKOSH (L) VORTAC** 111.8 OSH Chan 55 N43°59.43' W88°33.36' 165° 13.5 NM to fld. 780/2E.  
**ILS/DME** 108.3 I-FLD Chan 20 Rwy 36 LOC only.

**FORT ATKINSON MUNI** (61C) 3 NE UTC-6(-5DT) N42°57.79' W88°49.06' **CHICAGO**  
 800 B FUEL 100LL TPA—1800(1000) NOTAM FILE GRB **L-28H**  
 RWY 03-21: H3801X60 (ASPH) S-12 MIRL **IAP**  
 RWY 03: Trees. RWY 21: PAPI(P2L)—GA 3.0° TCH 30'. Tree.  
**AIRPORT REMARKS:** Unattended. Parachute Jumping. Fuel avbl PPR call 920-563-7760. Ultralight activity on and invof arpt. Rwy 03-21 pilots req to fly rwy heading and climb to 1400' MSL before turning east. MIRL Rwy 03-21 preset on low ints, to ACTIVATE higher ints and PAPI Rwy 21—CTAF.  
**COMMUNICATIONS:** CTAF 122.9  
**MADISON APP/DEP CON** 120.1 (1200-0500Z±) **CHICAGO CENTER APP/DEP CON** 133.3 (0500-1200Z±).  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.  
**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 247° 25.2 NM to fld. 1080/2E. **HIWAS.**

**FOX RIVER** (See ROCHESTER)

**FRANKS SPB** (See LAC DU FLAMBEAU)

**FRANKSVILLE****CINDY GUNTLY MEML** (62C) 7 NW UTC-6(-5DT) N42°49.42' W88°05.67'

CHICAGO

790 S4 FUEL 100LL, MOGAS TPA-1790(1000) NOTAM FILE GRB

RWY 01-19: 2425X70 (TURF) LIRL (NSTD).

RWY 01: Tree. RWY 19: Tree.

RWY 18-36: 1200X80 (TURF)

RWY 18: Trees. RWY 36: Tree.

**AIRPORT REMARKS:** Attended Mon-Fri 1430-0000Z†, Sat 1700-0000Z†. Rwy 18 and Rwy 19 ground drops off rapidly at S end. Rwy 18-36 rough and undulating rolling terrain. ACTIVATE NSTD LIRL Rwy 01-19—CTAF. Rwy 01-19 NSTD LIRL has two pairs of lgts each end.

COMMUNICATIONS: CTAF 122.9

**FRIENDSHIP (ADAMS)****ADAMS CO LEGION FLD** (63C) 1 E UTC-6(-5DT) N43°57.67' W89°47.28'

CHICAGO

976 B FUEL 100LL NOTAM FILE GRB

L-286

RWY 15-33: H3400X60 (ASPH) S-12.5 MIRL 0.3% up SE

IAP

RWY 15: REIL. PAPI(P2L). Trees.

RWY 33: REIL. PAPI(P2L). Trees.

RWY 08-26: 2825X100 (TURF)

RWY 08: Trees. RWY 26: Trees.

**AIRPORT REMARKS:** Unattended. Fuel avbl 24 hrs with credit card.

Ultralight activity at arpt. Rwy 08-26 CLOSED Dec 1-Apr 1. Aft

departing Rwy 15 turn to a heading of 180° after takeoff. Rwy

08-26 marked with 3' white cones. ACTIVATE MIRL Rwy 15-33

and REIL Rwy 15 and Rwy 33—CTAF.

COMMUNICATIONS: CTAF 122.9

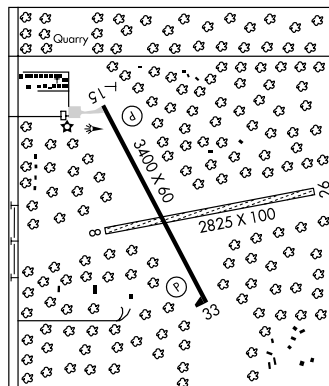
VOLK APP/DEP CON 135.25 (1300-2100Z†)

CHICAGO CENTER/APP DEP CON 133.3 (2100-1300Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLL.

DELLS (H) VORTAC 117.0 DLL Chan 117 N43°33.05'

W89°45.82'. 355° 24.6 NM to fld. 1020/3E.

**GAMIE** N44°09.75' W88°35.10' NOTAM FILE ATW.

GREEN BAY

NDB (LOM) 230 AT 028° 6.4 NM to Outagamie Co.

**GENERAL MITCHELL INTL** (See MILWAUKEE)**GENOA CITY****VINCENT** (64C) 3 NE UTC-6(-5DT) N42°31.10' W88°18.02'

CHICAGO

880 TPA-1680(800) NOTAM FILE GRB

RWY 09-27: 1775X130 (TURF)

RWY 09: Trees. RWY 27: Road.

**AIRPORT REMARKS:** Unattended. Rwy 09-27 W end rises +15'.

COMMUNICATIONS: CTAF/UNICOM 122.8

**GILBERT FIELD** (See RIO)**GRAND GENEVA RESORT** (See LAKE GENEVA)

**GRANTSBURG MUNI** (GTG) 2 NE UTC-6(-5DT) N45°47.88' W92°39.86'

**GREEN BAY**

927 B TPA-1727(800) NOTAM FILE GRB

L-14I

**RWY 05-23:** 3315X120 (TURF)

IAP

**RWY 05:** Trees. **RWY 23:** Trees.

**RWY 12-30:** H3000X60 (ASPH) MIRL

**RWY 30:** Trees.

**AIRPORT REMARKS:** Unattended. Rwy 05-23 CLOSED Nov 1-Apr 15.

Deer and waterfowl on and invof arpt. ACTIVATE MIRL Rwy

12-30-CTAF. Water twr lctd 5060' southwest Rwy 05, 1100'

MSL/182'AGL. Rwy 05-23 marked by yellow cones.

**COMMUNICATIONS:** CTAF 122.9

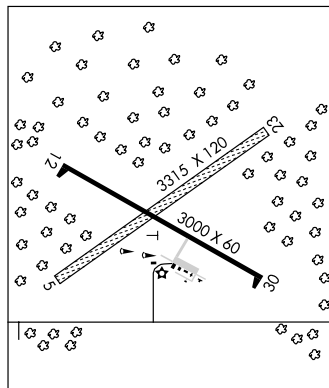
**SIREN RCO** 122.1R 109.4T (GREEN BAY RADIO)

**MINNEAPOLIS CENTER APP/DEP CON** 121.05

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RZN.

**SIREN (L) VOR/DME** 109.4 RZN Chan 31 N45°49.23'

W92°22.47' 262° 12.2 NM to fld. 987/2E. **HIWAS.**



**GREEN BAY** N44°33.31' W88°11.69' NOTAM FILE GRB.

**GREEN BAY**

(H) **VORTACW** 115.5 GRB Chan 102 146° 5.1 NM to

H-2I, L-31A

Austin Straubel Intl. 767/1E. **HIWAS.**

**RCO** 122.55 122.2 (GREEN BAY RADIO)

**GREEN BAY**

**AUSTIN STRAUDEL INTL** (GRB) 7 SW UTC-6(-5DT) N44°29.08' W88°07.78'  
 695 B S4 FUEL 100LL, JET A OX 1, 3 LRA ARFF Index—See Remarks  
 NOTAM FILE GRB

**GREEN BAY**  
 H-2J, L-31A  
 IAP, AD

**RWY 18-36:** H8701X150 (CONC-GRVD) S-95, D-165, ST-175, DT-275 HIRL

**RWY 18:** REIL. PAPI(P4R)—GA 3.0° TCH 54'. Thld displcd 499'. Road.  
 Rgt tfc.

**RWY 36:** MALSR. PAPI(P4L)—GA 3.0° TCH 50'.

**RWY 06-24:** H7700X150 (CONC-GRVD) S-90, D-160, ST-175,  
 DT-260 HIRL

**RWY 06:** MALSR. PAPI(P4L)—GA 3.0° TCH 38'.

**RWY 24:** PAPI(P4L)—GA 3.0° TCH 50'. Tower.

**LAND AND HOLD SHORT OPERATIONS**

| LANDING       | HOLD SHORT POINT | DIST AVBL |
|---------------|------------------|-----------|
| <b>RWY 18</b> | 06-24            | 2692      |
| <b>RWY 24</b> | 18-36            | 6050      |
| <b>RWY 36</b> | 06-24            | 4932      |

**RUNWAY DECLARED DISTANCE INFORMATION**

**RWY 18:** TORA-8701 TODA-8701 ASDA-8701 LDA-8201

**RWY 36:** TORA-8201 TODA-8201 ASDA-8201 LDA-8701

**AIRPORT REMARKS:** Attended 1100-0400Z†. Deer and birds on and in/ov

arpt. Request voluntary compliance in avoiding noise sensitive areas N and E of arpt between midnight and 6 a.m. Rwy 18 touch and go tfc to use rgt tfc during hrs when twr clsd. Twys N and E not avbl for air carrier ops with more than 30 passenger seats. Class I, ARFF Index C. ARFF index D available with prior permission call arpt manager at 920-498-4820. Rwy 06 touchdown runway visual range avbl. Rwy 36 touchdown runway visual range avbl. When twr is clsd the preferred rwy is preset on low or med ints; to increase ints and ACTIVATE HIRL Rwy 06-24 and Rwy 18-36; MALSR Rwy 06, Rwy 36, REIL Rwy 18 and PAPI Rwy 18—CTAF. Flight Notification Service (ADCUS) available.

**WEATHER DATA SOURCES:** ASOS (920) 494-7140. HIWAS 115.5 GRB. LLWAS.

**COMMUNICATIONS:** CTAF 118.7 ATIS 124.1 UNICOM 122.95

**GREEN BAY RCO** 122.55 122.2 (GREEN BAY RADIO)

① **GREEN BAY APP CON** 119.4 (1130-0530Z‡) ② **GREEN BAY DEP CON** 126.55 (1130-0530Z‡)

③ **MINNEAPOLIS CENTER APP/DEP CON** 125.55 (0530-1130Z‡)

**GREEN BAY TOWER** 118.7 (1130-0530Z‡) **GND CON** 121.9 **CLNC DEL** 121.75

**AIRSPACE:** CLASS C svc 1130-0530Z‡ ctc **APP CON** other times CLASS E.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB. VHF/DF ctc GREEN BAY RADIO.

**GREEN BAY (H) VORTACW** 115.5 GRB Chan 102 N44°33.31' W88°11.69' 146° 5.1 NM to fld. 767/1E.  
 HIWAS.

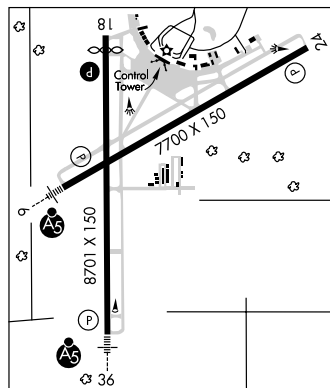
**FAMIS NDB (LOM)** 356 GR N44°26.43' W88°14.38' 063° 5.4 NM to fld. LOM unmonitored.

**DEPRE NDB (MHW/LOM)** 332 SG N44°23.91' W88°07.97' 004° 5.2 NM to fld. LOM unmonitored.

**ILS/OME** 109.5 I-GRB Chan 32 Rwy 06 Class IE. LOM FAMIS NDB. LOC/GS/LOM unmonitored.

**ILS** 109.9 I-SGZ Rwy 36 Class IE. LOM DEPRE NDB. LOC/GS/LOM unmonitored.

**ASR** (1130-1730Z‡)

**GUTZMER'S TWIN OAKS** (See WHITEWATER)**HAHN SKY RANCH** (See WEST BEND)

**HARTFORD MUNI** (HXF) 2 NW UTC-6(-5DT) N43°20.95' W88°23.48'

**CHICAGO**  
 L-28H  
 IAP

1069 B S4 FUEL 100LL, MOGAS TPA—See Remarks NOTAM FILE GRB

**RWY 11-29:** H3000X75 (ASPH) S-8 MIRL

**RWY 11:** Road. **Rwy 29:** Trees.

**RWY 18-36:** 2259X215 (TURF)

**RWY 18:** Road.

**AIRPORT REMARKS:** Unattended. Glider and ultralight activity on arpt. Slight downhill slope Idg Rwy 18. Rwy 36 +78' water twr 3885' from apch end. TPA for ultralight acft 1569(500). Rgt tfc pattern ultralight and glider acft. Rwy 18-36 thld marked with orange and white wooden A-frames.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

① **MILWAUKEE APP/DEP CON** 125.35

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.

**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 339° 14.7 NM to fld. 1080/2E.  
 HIWAS.

**WEST BEND (T) VOR** 109.8 BJB N43°25.32' W88°07.52' 251° 12.4 NM to fld. NOTAM FILE ETB.

**NDB (MHW)** 200 HXF N43°20.86' W86°23.71' at fld.

**HAYWARD** N46°01.14' W91°26.78' NOTAM FILE HYR. **GREEN BAY**  
 (L) VOR/DME 113.4 HYR Chan 81 at Sawyer Co. 1207/3E. **ASOS** **L-141**  
 VOR portion unusable blo 10000'. DME portion unusable; 160°-050° blo 4000' byd 20 NM; 051°-160° blo  
 9000' byd 13 NM.  
**RCO 122.1R 113.4T (GREEN BAY RADIO)**

**HAYWARD**

**SAWYER CO** (HYR) 2 NE UTC-6(-5DT) N46°01.52' W91°26.66' **GREEN BAY**  
 1216 B **FUEL** 100LL, JET A NOTAM FILE HYR **H-21, L-141**  
**RWY 02-20:** H5003X100 (ASPH) S-40, D-65, ST-82 MIRL **IAP**  
**RWY 02:** REIL. PAPI (P4L)—GA 3.0° TCH 38'. Road. **RWY 20:** REIL. PAPI(P4L). GA 3.0° TCH 36'. Trees.  
**RWY 16-34:** 1240X120 (TURF)  
**RWY 16:** Trees. **RWY 34:** Trees.  
**AIRPORT REMARKS:** Attended Jun-Sep Mon-Sat 1300-0100Z†, Sun 1400-0100Z†, Oct-May Mon-Sat 1300-2300Z†,  
 Sun 1400-0100Z†. Rwy 16-34 CLOSED Dec 1 thru Apr 15. Deer on and infov arpt. ACTIVATE MIRL Rwy 02-20,  
 PAPI Rwys 02, 20, REIL Rwy 02 and 20—CTAF. Rwy 20 PAPI OTS indef. Rwy 16-34 thlds marked with orange  
 steel A-frames.  
**WEATHER DATA SOURCES:** **ASOS** 113.4 HYR (715) 634-6138.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8  
**HAYWARD RCO 122.1R 113.4T (GREEN BAY RADIO)**  
**MINNEAPOLIS CENTER APP/DEP CON** 126.45  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE HYR.  
**HAYWARD (L) VOR/DME** 113.4 HYR Chan 81 N46°01.14' W91°26.78' at fld. 1207/3E. **ASOS**.  
**SEELEY NDB (MHW)** 344 SLY N46°06.73' W91°23.08' 205° 5.8 NM to fld. NOTAM FILE GRB.  
 NDB unusable beyond 15 NM.  
**ILS/DME** 108.5 I-HTY Chan 22 Rwy 20. LOC only.

**HILLSBORO**

**JOSHUA SANFORD FLD** (HBW) 1 NE UTC-6(-5DT) N43°39.40' W90°19.69' **CHICAGO**  
 938 NOTAM FILE GRB **L-28G**  
**RWY 05-23:** H3070X46 (ASPH) LIRL (NSTD)  
**RWY 05:** Thld dsplcd 733'. Fence.  
**RWY 23:** Trees.  
**AIRPORT REMARKS:** Unattended. Birds on and infov arpt. Rwy 05 thld lgts black (obscured) and green. Rwy 23 thld lgts  
 located 245' from relocated thld. ACTIVATE LIRL Rwy 05-23—CTAF.  
**COMMUNICATIONS:** CTAF 122.9  
**CHICAGO CENTER APP/DEP CON** 133.3  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.  
**LONE ROCK (L) VOR/DME** 112.8 LNR Chan 75 N43°17.66' W90°07.99' 339° 23.3 NM to fld.

**HORLICK** N42°45.73' W87°48.88' NOTAM FILE RAC. **CHICAGO**  
 (T) VOR/DME 117.7 HRK Chan 124 HRK at John H. Batten. 669/2W. **ASOS** **L-28H, A**  
 VOR portion unusable 090°-213°.

**IOLA**

**CENTRAL CO** (68C) 4 E UTC-6(-5DT) N44°30.33' W89°01.51' **GREEN BAY**  
 876 S4 TPA-1876(1000) NOTAM FILE GRB  
**RWY 04-22:** 2530X60 (TURF)  
**RWY 04:** Trees. **RWY 22:** Tree.  
**RWY 09-27:** 1800X120 (TURF)  
**RWY 09:** Trees. **RWY 27:** Tree.  
**RWY 13-31:** 1745X130 (TURF)  
**RWY 13:** Trees. **RWY 31:** Trees.  
**AIRPORT REMARKS:** Unattended. Arpt CLOSED to wheeled acft when rwys covered with snow or ice. Ski tfc use Rwy  
 04-22 only. Deer on and infov arpt. Rwy 04-22 marked with yellow barrels. Rwy 09-27 marked with yellow  
 cones. Rwy 13-31 marked with yellow barrels.  
**COMMUNICATIONS:** CTAF 122.9

**IOWA COUNTY** (See MINERAL POINT)

**J. DOUGLAS BAKE MEML** (See OCONTO)

**JANA** (See EDGERTON)

**JANESVILLE** N42°33.48' W89°06.32' NOTAM FILE FEP.

CHICAGO

(L) **VOR/DME** 114.3 JVL Chan 90 035° 4.7 NM to Southern Wisconsin Rgnl. 931/3E. **HIWAS.**

L-28H

VOR portion unusable 025° 060° byd 25 NM blo 4000', 130°-150° byd 30 NM blo 4000'.

DME unusable 130°-150° byd 30 NM blo 4000'.

**RCO** 122.1R 114.3T (GREEN BAY RADIO)

## JANESVILLE

**SOUTHERN WISCONSIN RGNL** (JVL) 3 SW UTC-6(-5DT) N42°37.22' W89°02.49'

CHICAGO

808 B S4 **FUEL** 100LL, JET A TPA-1808(1000) Class IV, ARFF Index A

H-5D, L-28H

NOTAM FILE JVL

IAP, AD

**RWY 14-32:** H7301X150 (CONC) S-85, D-190, ST-175, DT-400 **HIRL**

**RWY 14:** REIL. PAPI(P4L)—GA 3.0° TCH 60'.

**RWY 32:** MALSR. VASI(V4L)—GA 3.0° TCH 51'.

**RWY 04-22:** H6700X150 (ASPH) S-95, D-130, ST-165,

DT-230 **HIRL**

**RWY 04:** MALSR. PAPI(P4L)—GA 3.0° TCH 43'.

**RWY 22:** REIL VASI(V4L)—GA 3.0° TCH 60'. Tree.

**RWY 18-36:** H5003X75 (ASPH) S-40, D-50, DT-80 **MIRL**

**RWY 18:** Road.

**AIRPORT REMARKS:** Attended continuously. Closed to scheduled air carrier ops with greater than 9 passenger seats and unscheduled air carrier ops greater than 30 passenger seats. 90-day PPR, call 608-757-5768. Lgt sport acft with cruise speed of 60 mph or less enter tfc pat at 500' AGL. Rwy 32 and Rwy 36 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd **HIRL** Rwy 04-22 preset on low ints; to incr ints and **ACTIVATE** MALSR Rwy 04 and Rwy 32, PAPI Rwy 04, **HIRL** Rwy 14-32, **MIRL** Rwy 18-36, REIL Rwy 14, PAPI Rwy 14 and VASI Rwy 32—CTAF. VASI Rwy 22 opr 24 hrs.

**WEATHER DATA SOURCES:** AWOS-3 (608) 758-1723. LAWRS (1200-0300Z).

**COMMUNICATIONS:** CTAF 118.8 ATIS 128.25 **UNICOM** 122.95

**JANESVILLE RCO** 122.1R 114.3T (GREEN BAY RADIO)

Ⓡ **ROCKFORD APP/DEP CON** 121.0 **CLNC DEL** 121.65 (when twr clsd)

**JANESVILLE TOWER** 118.8 (1200-0300Z) **GND CON/CLNC DEL** 121.65 (1200-0300Z)

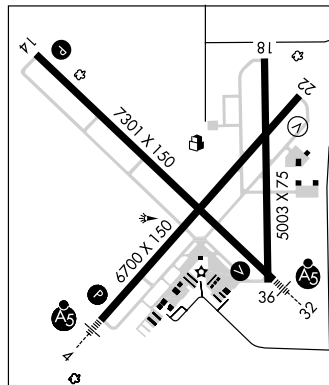
**AIRSPACE:** CLASS D svc 1200-0300Z other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FEP.

**JANESVILLE (L) VOR/DME** 114.3 JVL Chan 90 N42°33.48' W89°06.32' 034° 4.7 NM to fld. 931/3E. **HIWAS.**

**ILS** 109.1 I-JVL Rwy 04. Class IE.

**ILS/DME** 111.35 I-REE Chan 50(Y) Rwy 32. Class IE. **ILS/DME** unmonitored.



**JOHN F KENNEDY MEML** (See ASHLAND)

**JOHN H. BATTEN** (See RACINE)

**JUNEAU** N43°25.74' W88°42.13' NOTAM FILE UNU.

CHICAGO

**NDB (MHW)** 344 UNU at Dodge Co.

L-28H





**KINGS LAND O' LAKES** (See LAND O' LAKES)

**KOOKY** N44°12.95' W88°23.94' NOTAM FILE ATW.  
 NDB (MHW/LOM) 407 AQ 298° 5.8 NM to Outagamie Co Rgnl. Unmonitored.

**GREEN BAY**  
 L-28H

**LA CROSSE MUNI** (LSE) 4 NW UTC-6(-5DT) N43°52.76' W91°15.40'**CHICAGO**

655 B S4 FUEL 100LL, JET A Class I, ARFF Index B NOTAM FILE LSE

H-21, L-28G

RWY 18-36: H8742X150 (CONC-GRVD) S-125, D-190, ST-175, DT-430, DDT-850 HIRL IAP, AD

RWY 18: MALSR. PAPI(P4L)—GA 3.0° TCH 55'.

RWY 36: REIL. VASI(V4L)—GA 3.0° TCH 28'. Thld dspcd 1131'.  
Tree.RWY 13-31: H6050X150 (ASPH-GRVD) S-125, D-190, ST-175,  
DT-430 HIRL

RWY 13: REIL. VASI(V4L)—GA 3.0° TCH 32'. Trees.

RWY 31: VASI(V4L)—GA 3.6° TCH 59'. Thld dspcd 739'. Tower.

RWY 03-21: H5199X150 (ASPH) S-65, D-110, ST-139,  
DT-190 HIRL

RWY 03: PAPI(P4L)—GA 4.0° TCH 40'. Pole.

RWY 21: PAPI(P4L)—GA 4.0° TCH 40'. Ground.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 13: TORA-5300 TODA-5300 ASDA-5300 LDA-5300

RWY 31: TORA-6050 TODA-6050 ASDA-6050 LDA-5300

RWY 18: TORA-8742 TODA-8742 ASDA-8536 LDA-8536

RWY 36: TORA-8742 TODA-8742 ASDA-8557 LDA-7426

**AIRPORT REMARKS:** Attended 1200-0300Z†. For attendant other hrs call 608-783-8359. Rwy 36 and Rwy 03 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. Deer, waterfowl and other birds on and invof arpt. Heavy concentrations of waterfowl spring and fall. Twr 1390' AGL 6 NM southwest. Numerous twrs up to 836' AGL 4 NM southeast. When twr clsd HIRL Rwy 13-31 preset low inst; to increase ints and ACTIVATE HIRL Rws 18-36 and 03-21; REIL Rws 13 and 36; MALSR Rwy 18—CTAF.

**WEATHER DATA SOURCES:** ASOS (608) 781-9067.**COMMUNICATIONS:** CTAF 118.45 ATIS 124.95 UNICOM 122.95

RCO 122.2 122.35 (GREEN BAY RADIO)

MINNEAPOLIS CENTER APP/DEP CON 128.6

TOWER 118.45 (1200-0300Z†) GND CON 121.8

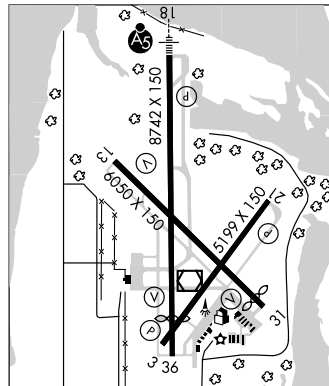
**AIRSPACE:** CLASS D svc 1200-0300Z† other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LSE.

(T) VOR/DME 108.4 LSE Chan 21 N43°52.57' W91°15.36' at fld. 650/2E.

VOR/DME unusable 100°-150° and 230°-060° byd 20 NM blo 3300'.

MINDI NDB (LOM) 272 LS N44°00.24' W91°15.65' 177° 7.5 NM to fld.

ILS 111.1 I-LSE Rwy 18. Class IT. LOM MINDI NDB. ILS unmonitored when twr clsd.

**LAC DU FLAMBEAU****FRANKS SPB** (4P5) 7 SW UTC-6(-5DT) N45°53.00' W90°00.01'**GREEN BAY**

1650 FUEL 80 NOTAM FILE GRB

WATERWAY N-S: 9000X1000 (WATER)

WATERWAY E-W: 2640X1000 (WATER)

**SEAPLANE REMARKS:** Attended May-Oct dawn-dusk. Dock in poor condition. Call ahead to ensure fuel avbl.**COMMUNICATIONS:** CTAF 122.9

**LADYSMITH****RUSK CO**

(RCX) 4 NE UTC-6(-5DT) N45°29.81' W91°00.03'

8238 B S4 FUEL 80, 100LL NOTAM FILE GRB

RWY 14-32: H4000X75 (ASPH) S-25 MIRL

RWY 14: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.

RWY 32: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Trees.

RWY 01-19: H3200X75 (ASPH) MIRL 0.5% up N

RWY 01: Tree. RWY 19: Road.

AIRPORT REMARKS: Attended May-Sep 1400-0100Z†, Oct-Apr

1400-2300Z†. For attendance after hrs call

715-924-2080/403-0524. All fuel 24 hr self serve. Occasional

deer invof arpt. Rwy 32 left side REIL OTS indef. ACTIVATE MIRL

Rwy 14-32 and Rwy 01-19, PAPI Rwy 14 and Rwy 32 and REIL

Rwy 14 and Rwy 32—122.8.

WEATHER DATA SOURCES: AWOS-3 118.125 (715) 532-2665.

COMMUNICATIONS: CTAF/UNICOM 122.8

RICE LAKE RCO 122.3 (GREEN BAY RADIO)

GCO 121.725 (FLIGHT SERVICES)

RADIO AIDS TO NAVIGATION: NOTAM FILE RPD.

RICE LAKE (T) VORW/DME 110.0 RPD Chan 37 N45°24.91'

W91°46.68' 080° 33.2 NM to fld. 1092/1E. OTS indef.

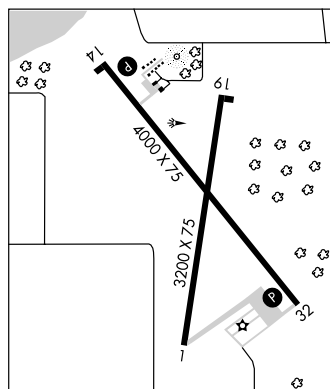
NDB (MHW) 356 RCX N45°30.11' W91°00.07' at fld. NOTAM

FILE GRB. Unmonitored.

GREEN BAY

L-141

IAP

**LAKE GENEVA****GRAND GENEVA RESORT**

(C02) 2 NE UTC-6(-5DT) N42°36.90 W88°23.38

835 B NOTAM FILE GRB

RWY 05-23: H3830X75 (ASPH) MIRL

RWY 05: Trees. Rgt tfc. RWY 23: Trees.

AIRPORT REMARKS: Unattended. Rwy 05-23 extensive cracking entire

rwy. For noise abatement use Rwy 23. Rotating bcn OTS indef.

MIRL Rwy 05-23 preset on medium ints dusk-dawn.

COMMUNICATIONS: CTAF/UNICOM 122.8

® MILWAUKEE APP/DEP CON 120.15 (South)

RADIO AIDS TO NAVIGATION: NOTAM FILE IKK.

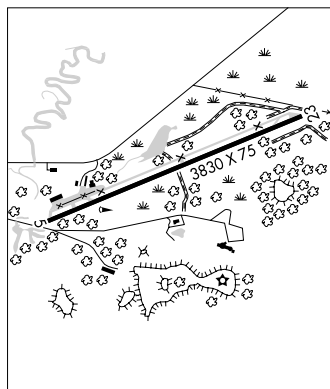
NORTHBROOK (H) VORW/DME 113.0 OBK Chan 77 N42°13.29'

W87°57.11' 323° 30.6 NM to fld. 758/2W.

CHICAGO

L-28H, A

IAP

**LAKELAND/NOBLE F. LEE MEML FLD**

(SEE MINOCQUA/WOODRUFF)

**LAKE LAWN**

(See DELAVAN)

**LAKE LAWN**

N42°41.93' W88°35.59' NOTAM FILE GRB.

NDB (MHW) 404 LVV 185° 3.9 NM to Lake Lawn. OTS indef.

CHICAGO

A

**LANCASTER MUNI** (73C) 4 S UTC-6(-5DT) N42°46.83' W90°40.86'

CHICAGO

1008 B FUEL 100LL, MOGAS TPA-1808(800) NOTAM FILE GRB

L-286

RWY 18-36: H3850X45 (ASPH) S-13 LIRL

RWY 18: Thld dsplcd 155'. Tree.

RWY 36: Thld dsplcd 220'.

**AIRPORT REMARKS:** Unattended. For fuel call 608-723-4246. CAUTION:

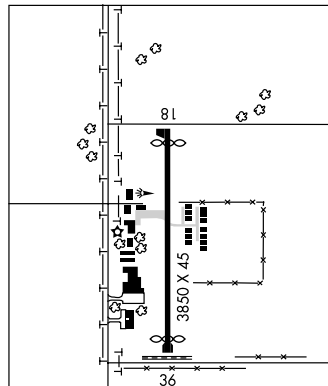
Vehicles and people occasionally crossing rwy to reach hangar area on E side of rwy. Ultralight and skydiving activity on and invof arpt. Rwy 18-36 35' p-line parallels W side 365' from centerline.

Rwy 18-36 dsplcd thlds marked only with thld lgts.

**COMMUNICATIONS:** CTAF/UNICOM 122.8**RADIO AIDS TO NAVIGATION:** NOTAM FILE DBQ.

DUBUQUE (H) VORTACW 115.8 DBQ Chan 105 N42°24.09'

W90°42.54' 359° 22.8 NM to fld. 1051/4E.

**LAND O' LAKES** N46°08.98' W89°12.63' NOTAM FILE LNL.

GREEN BAY

NDB (MHW) 396 LNL at Kings Land O' Lakes. Unmonitored.

L-14J

**LAND O' LAKES****KINGS LAND O' LAKES** (LNL) 1 SE UTC-6(-5DT) N46°09.24' W89°12.73'

GREEN BAY

1704 B S4 FUEL 100LL NOTAM FILE LNL

L-14J

RWY 14-32: H4000X75 (ASPH) S-12 MIRL

IAP

RWY 14: REIL. PAPI(P2L)—GA 4.0° TCH 35'. Thld dsplcd 200'. Trees.

RWY 32: PAPI(P2L)—GA 3.0° TCH 26'. Road.

RWY 05-23: 2580X130 (TURF)

RWY 05: Trees.

RWY 23: Thld dsplcd 600'. Trees.

**AIRPORT REMARKS:** Attended 1400-2300Z±. Fuel 24 hr self svc. Occasional deer on and invof arpt. Rwy 05-23

CLOSED Dec 1 to Apr 15. Rwy 05-23 marked with yellow cones. Rwy 14 ngt ldg length 3600'. Thd lgts 400'fm end of rwy. ACTIVATE MIRL Rwy 14-32, and REIL Rwy 14—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.525 (715) 547-6313.**COMMUNICATIONS:** CTAF/UNICOM 122.8

® MINNEAPOLIS CENTER APP/DEP CON 133.65

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

RHINELANDER (L) VORTAC 109.2 RHI Chan 29 N45°38.03' W89°27.47' 016° 32.9 NM to fld. 1590/2E.

HIWAS.

LAND O' LAKES NDB (MHW) 396 LNL N46°08.98' W89°12.63' at fld. NOTAM FILE LNL.

Unmonitored.

**LANGLADE CO** (See ANTIGO)

**LA POINTE****MADLINE ISLAND** (4R5) 2 NE UTC-6(-5DT) N46°47.32' W90°45.52'

GREEN BAY

649 B NOTAM FILE GRB

L-14I

RWY 04-22: H3000X75 (ASPH) S-12.5 MIRL 0.8% up NE

IAP

RWY 04: PAPI(P2L)—GA 3.45° TCH 45'. Trees.

RWY 22: PAPI(P2L)—GA 3.45° TCH 38'. Trees.

AIRPORT REMARKS: Unattended. Deer on and invof arpt. ACTIVATE MIRL

Rwy 04-22 and PAPI Rwy 04 and Rwy 22—CTAF.

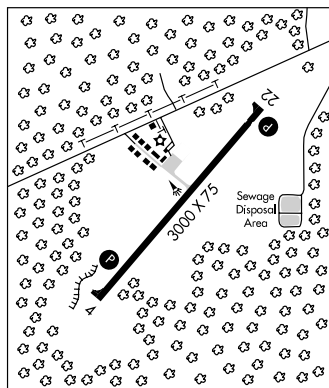
COMMUNICATIONS: CTAF 122.9

① MINNEAPOLIS CENTER APP/DEP CON 133.55

RADIO AIDS TO NAVIGATION: NOTAM FILE ASX.

ASHLAND (T) VORW/DME 110.2 ASX Chan 39

N46°32.96' W90°55.04' 022° 15.8 NM to fld. 820/2E.

**LAWRENCE J. TIMMERMAN** (See MILWAUKEE)**LONE ROCK** N43°17.66' W90°07.99' NOTAM FILE LNR.

CHICAGO

(L) VORW/DME 112.8 LNR Chan 75 202° 5.4 NM to Tri-Co Rgnl. 1184/0E. HIWAS.

L-11D, 12E

RCO 122.35 (GREEN BAY RADIO)

**LONE ROCK****TRI-CO RGNL** (LNR) 2 N UTC-6(-5DT) N43°12.71' W90°10.79'

CHICAGO

717 B S3 FUEL 100LL, JET A TPA—1517(800) NOTAM FILE LNR

H-5D, L-28G

RWY 09-27: H5000X75 (ASPH) S-12.5 MIRL

IAP

RWY 09: PAPI(P2L)—GA 3.0° TCH 35'. Antenna.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees.

RWY 18-36: H1850X60 (ASPH) S-12.5 MIRL

RWY 18: Thld dsplcd 138'. Road. RWY 36: Road.

AIRPORT REMARKS: Attended Mon-Fri 1400-2300Z†. Self-serve fuel avbl 24 hrs. MIRL Rwy 09-27 preset low ints dusk-dawn; to increase ints and ACTIVATE MIRL Rwy 18-36, PAPI Rwy 09 and Rwy 27—CTAF.

WEATHER DATA SOURCES: ASOS 119.425 (608) 583-2576 HIWAS 112.8 LNR.

COMMUNICATIONS: CTAF/UNICOM 123.0

LONE ROCK RCO 122.35 (GREEN BAY RADIO)

① MADISON APP/DEP CON 135.45 (1200-0500Z†)

① CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z†)

AIRSPACE: CLASS E svc 1400-2200Z† other times CLASS G.

RADIO AIDS TO NAVIGATION: NOTAM FILE LNR.

LONE ROCK (L) VORW/DME 112.8 LNR Chan 75 N43°17.66' W90°07.99' 202° 5.4 NM to fld. 1184/0E.

HIWAS.

ILS/DME 108.35 I-LNR Chan 20(Y) Rwy 27.

**L. O. SIMENSTAD MUNI** (See OSCEOLA)**MADLINE ISLAND** (See LA POINTE)**MADISON** N43°08.69' W89°20.38' NOTAM FILE MSN.

CHICAGO

(L) VORTACW 108.6 MSN Chan 23 at Dane Co Rgnl-Truax Fld. 860/3E.

L-28H

VOR portion unusable: 155°-230° byd 20NM blo 2800'; 230°-155° byd 30NM blo 2800'.

DME unusable:

010-070° byd 20 NM blo 4500'

210-010° byd 30 NM blo 4000'

070-210° byd 20 NM blo 3500'

RCO 122.6 (GREEN BAY RADIO)

**MADISON****BLACKHAWK AIRFIELD**

(87Y) 10 E UTC-6(-5DT) N43°06.30' W89°11.13'

**CHICAGO**

920 B FUEL 100LL TPA-1920(1000) NOTAM FILE GRB

L-28H

RWY 04-22: H2814X57 (ASPH) 0.5% Up SW

IAP

RWY 04: Bldg. Rgt tfc. RWY 22: Thld dsplcd 260'. Trees.

RWY 09-27: H2203X56 (ASPH) LIRL(NSTD) 0.8% up W

RWY 09: Trees. RWY 27: Thld dsplcd 230'. Road. Rgt tfc.

**AIRPORT REMARKS:** Unattended. Deer and turkeys on and invof arpt. Rwy 04-22 sfc cracks with 1' vegetation growing on rwy. Rwy 09 avoid overflight of farm ¾ mile E. Rwy ends obstructed visually from others by weeds and trees approximate 10' tall. Rwy 09-27 NSTD LIRL; rwy lgts +2 to 3' above rwy and NSTD spacing. Rwy 09-27 lgtd 1973'.

COMMUNICATIONS: CTAF/UNICOM 122.7

Ⓡ MADISON APP/DEP CON 120.1 (1200-0500Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z‡)

RADIO AIDS TO NAVIGATION: NOTAM FILE MSN.

MADISON (L) VORTACW 108.6 MSN Chan 23 N43°08.69' W89°20.38' 106° 7.2 NM to fld. 860/3E.

**DANE CO RGNL-TRUAX FLD**

(MSN) 5 NE UTC-6(-5DT) N43°08.39' W89°20.25'

**CHICAGO**

887 B S4 FUEL 100LL, JET A Class I, ARFF Index C NOTAM FILE MSN

H-5D, L-28H

RWY 18-36: H9006X150 (CONC-GRVD) S-100, D-200, ST-175, DT-350 HIRL CL

IAP, AD

RWY 18: MALSR. PAPI (P4L)—GA 3.0° TCH 57'. Thld dsplcd 400'.

Hill.

RWY 36: MALSR. PAPI(P4L)—GA 3.0° TCH 59'. Thld dsplcd 989'.

RWY 03-21: H7200X150 (CONC-GRVD) S-100, D-200, ST-175,

DT-350 HIRL 0.4% up NE

RWY 03: REIL. PAPI(P4L)—GA 3.0° TCH 49'. Thld dsplcd 430'.

Trees.

RWY 21: MALSR. PAPI(P4L)—GA 3.0° TCH 41'. Road.

RWY 14-32: H5846X150 (CONC-GRVD) S-75, D-190, ST-175,

DT-400 HIRL

RWY 14: REIL. Thld dsplcd 475'.

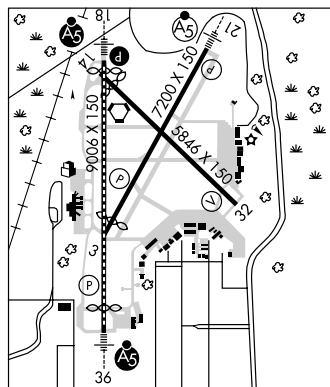
RWY 32: REIL. VASI(V4L)—GA 3.0° TCH 56'. Tree.

**LAND AND HOLD SHORT OPERATIONS**

| LANDING | HOLD SHORT POINT | DIST AVBL |
|---------|------------------|-----------|
| RWY 03  | 14-32            | 3400      |
| RWY 18  | 03-21            | 4850      |
| RWY 21  | 18-36            | 6450      |
| RWY 32  | 18-36            | 5300      |
| RWY 36  | 14-32            | 7050      |

**ARRESTING GEAR/SYSTEM**

RWY 18 BAK-14 BAK-12(B) (1500')



BAK-14 BAK-12(B) (750') RWY 36

BAK-14 BAK-12(B) (1620') RWY 21

**AIRPORT REMARKS:** Attended continuously. Birds on and invof arpt. PAEW SW corner of W ramp. Lgtd conc barricades

W edge of W ramp. Air carrier and turbo jet training flights prohibited. General aviation svcs only on E ramp.

General aviation access to and parking on W air carrier ramp is prohibited. Noise abatement procedures in effect ctc Arpt ops. Avoid overflight of Yahara River invof arpt blo 2000' AGL. Rwy 18 and Rwy 14 apch ends are

closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd HIRL Rwy 18-36

preset on low ints, to incr ints and ACTIVATE MALSR Rwy 18 and Rwy 36, HIRL Rwy 03-21 and Rwy 14-32. REIL

Rwy 03, Rwy 14, and Rwy 32 and PAPI Rwy 18—CTAF. Twy K, J, F, E not avbl to air carrier acft with greater than

9 seats. Twy F, G, G1 and G2 restricted to military. Rwy 18-36 touchdown and rollout runway visual range avbl.

**WEATHER DATA SOURCES:** ASOS (608) 249-0615. LLWAS

COMMUNICATIONS: CTAF 119.3 ATIS 124.65 UNICOM 122.95

MADISON RCO 122.6 (GREEN BAY RADIO)

Ⓡ MADISON APP CON 120.1 (EAST) 135.45 (WEST) (1200-0500Z‡)

Ⓡ MADISON DEP CON 126.85 (1200-0500Z‡)

Ⓡ CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z‡)

MADISON TOWER 119.3 (1200-0500Z‡) GND CON 121.9 CLNC DEL 121.62

**AIRSPACE:** CLASS C svc 1200-0500Z‡ ctc APP CON other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE MSN

MADISON (L) VORTACW 108.6 MSN Chan 23 N43°08.69' W89°20.38' at fld. 860/3E.

MONAH NDB (MHW/LOM) 400 MS N43°03.76' W89°20.75' 005° 4.6 NM to fld. NDB unmonitored when twr clsd.

ILS 109.9 I-MSN Rwy 36. Class IT. LOM MONAH NDB. Unmonitored when twr clsd.

ILS 110.1 I-DSZ Rwy 18. Class IB. Unmonitored when twr clsd.

ILS/DME 111.55 I-DQJ Chan 52Y Rwy 21.

ASR (1200-0500Z‡)

**MAGGS** N44°56.69' W91°22.42' NOTAM FILE EAU.  
**NDB (LOM)** 239 EA 224° 6.7 NM to Eau Claire–Chippewa Valley Rgnl. Unmonitored.

GREEN BAY

**MANITOWISH WATERS** (D25) 1 S UTC–6(–5DT) N46°07.32' W89°52.94'

GREEN BAY

1610 B FUEL 100LL NOTAM FILE GRB

L–14J

**RWY 14–32:** H3500X60 (ASPH) S–12.5 MIRL

IAP

**RWY 14:** Trees.

**RWY 32:** PAPI(P2L)—GA 3.5° TCH 41'. Trees.

**RWY 04–22:** 3299X120 (TURF)

**RWY 04:** Trees.

**RWY 22:** Trees.

**AIRPORT REMARKS:** Attended Jun–Sep 1430–2300Z†, Nov–Apr

1430–1530Z†, Oct and May 1430–1800Z†. 100LL avbl 24 hrs

with credit card. Airframe repairs on call 715–686–7523. Rwy

04–22 CLOSED winters. Be alert: Rwy 14–32 may be unusable

due to snow covered until 30 Apr. Birds and migratory waterfowl

on and invof arpt. Deer and coyotes on and invof arpt. MIRL Rwy

14–32 preset on low ints, to increase ints and ACTIVATE PAPI Rwy

32—CTAF. Rwy 04–22 marked with yellow cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

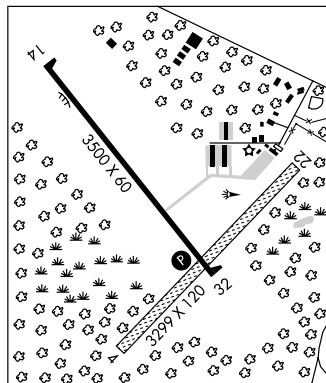
**MINNEAPOLIS CENTER APP/DEP CON** 133.65

**GCO** 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

**RHINELANDER (L) VORTAC** 109.2 RHI Chan 29 N45°38.03'

W89°27.47' 327° 34.3 NM to fld. 1590/2E. HIWAS.



**MANITOWOC CO** (MTW) 2 NW UTC–6(–5DT) N44°07.73' W87°40.84'

GREEN BAY

651 B S2 FUEL 100LL, JET A, MOGAS NOTAM FILE MTW

H–21, L–28H

**RWY 17–35:** H5001X100 (ASPH) S–60 HIRL

IAP

**RWY 17:** MALSR. VASI(V4L)—GA 3.0° TCH 42'.

**RWY 35:** REIL. VASI(V4L)—GA 3.0° TCH 45'. Tree.

**RWY 07–25:** H3341X100 (ASPH) S–12 MIRL 0.4% up W

**RWY 07:** Tree.

**AIRPORT REMARKS:** Attended Mon–Fri 1300Z†–dusk, Sat–Sun

1400Z†–dusk. For svc after hrs call 920–682–0043 during

attended hrs or 920–242–7527 after attended hrs. Geese and

numerous birds on and invof arpt. Rwy 35 REIL OTS indef.

ACTIVATE MIRL Rwy 07–25, HIRL Rwy 17–35, REIL Rwy 35 and

MALSR Rwy 17—CTAF.

**WEATHER DATA SOURCES:** AWOS–3 111.0 MTW (920) 682–1164.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**RCO** 122.1R 111.0T (GREEN BAY RADIO)

® **GREEN BAY APP/DEP CON** 120.2 (1130–0530Z†)

® **MINNEAPOLIS CENTER APP/DEP CON** 125.55 (0530–1130Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MTW.

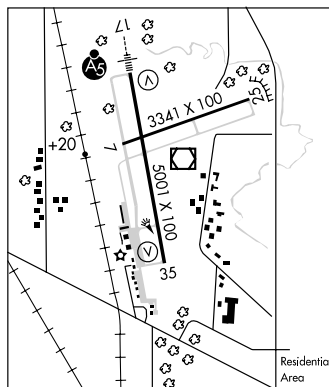
(T) **VOR/DME** 111.0 MTW Chan 47 N44°07.71'

W87°40.80' at fld. 650/2W. AWOS–3.

**MAWOC NDB (LOM)** 362 MT N44°11.98' W87°42.14' 162° 4.4

NM to fld.

**ILS** 111.3 I–MTW Rwy 17. Class IC. LOM MAWOC NDB. ILS unmonitored.



**MARSHFIELD MUNI** (MFI) 1 S UTC-6(-5DT) N44°38.21' W90°11.36'

GREEN BAY

1277 B S3 FUEL 100LL, JET A NOTAM FILE MFI

H-2J, L-141

RWY 16-34: H5000X100 (ASPH) S-35, D-50 MIRL 0.5% up NW

IAP

RWY 16: REIL. VASI(V2L)—GA 3.0° TCH 35'. Rgt tfc.

RWY 34: MALSR. VASI(V2L)—GA 3.0° TCH 42'.

RWY 04-22: H3600X100 (ASPH) S-35, D-45 MIRL

RWY 04: REIL. PAPI(P2L)—GA 3.0° TCH 29'. Rgt tfc.

RWY 22: Pole.

**AIRPORT REMARKS:** Attended 1400-0000Z± Nov-Apr. For after hrs svc call 715-743-4700. Rwy 34 departing acft climb to 2000' MSL prior to initiating rgt turn. Birds, waterfowl and deer invof arpt. Rotating bcn OTS indef. ACTIVATE MIRL Rwys 04-22 and 16-34 and MALSR Rwy 34 and VASI Rwy 16 and Rwy 34—CTAF. PAPI Rwy 04 ops continuously.

**WEATHER DATA SOURCES:** ASOS 121.575 (715) 387-6516.**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.55 (GREEN BAY RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 124.4

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MFI.

WAUSAU (L) VORTACW 111.6 AUW Chan 53 N44°50.81'

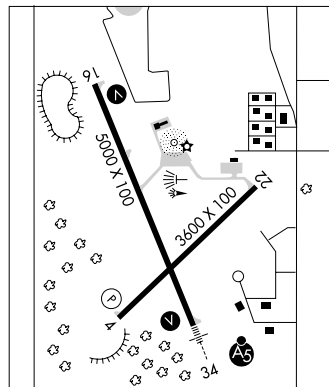
W89°35.19' 242° 28.7 NM to fld. 1205/2E.

NOTAM FILE AUW.

CALIN NDB (LOM) 266 DU N44°34.15' W90°09.06' 338° 4.4 NM to fld. Unmonitored 0300-1330Z±.

NDB (MHW) 391 MFI N44°38.45' W90°11.26' at fld.

SDF 109.9 DUS Rwy 34. LOM CALIN NDB.

**MAUSTON-NEW LISBON UNION** (See NEW LISBON)**MAWOC** N44°11.98' W87°42.14' NOTAM FILE MTW.

GREEN BAY

NDB (LOM) 362 MT 170° 4.4 NM to Manitowoc Co.

**McCoy** N43°56.27' W90°38.51' NOTAM FILE CMY.

CHICAGO

NDB (MHW) 412 CMY 287° 4.3 NM to Sparta/Fort McCoy.

L-286

**MEDFORD** N45°06.32' W90°18.52' NOTAM FILE MDZ.

GREEN BAY

NDB (MHW) 335 MDZ at Taylor Co.

L-141

**MEDFORD****TAYLOR CO** (MDZ) 3 SE UTC-6(-5DT) N45°06.09' W90°18.05'

GREEN BAY

1478 B FUEL 100LL, JET A TPA-2478(1000) NOTAM FILE MDZ

H-2J, L-141

RWY 09-27: H6902X75 (ASPH) MIRL 0.3% up E

IAP

RWY 09: PAPI(P2L)—GA 3.0°. TCH 31'. Tree.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 26'.

RWY 16-34: H4435X75 (ASPH) S-12.5 MIRL

RWY 16: PAPI(P2L). Tree.

RWY 34: REIL. PAPI(P2L).

**AIRPORT REMARKS:** Attended Mon-Fri 1330-2330Z±. For svc after hrs call 715-678-2974. Fuel 24 hr self svc. Deer on and invof arpt. For tkf on Rwy 34 left turn after 1000' AGL. MIRL Rwy 09-27 preset low ints; to increase ints and ACTIVATE MIRL Rwy 16-34 and PAPI Rwy 16 and Rwy 34; REIL Rwy 27 and Rwy 34—CTAF. Overnight tiedown fee.

**WEATHER DATA SOURCES:** AWOS-3 119.025 (715) 678-6030.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 124.4

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE AUW.

WAUSAU (L) VORTACW 111.6 AUW Chan 53 N44°50.81' W89°35.19' 295° 34.0 NM to fld. 1205/2E.

MEDFORD NDB (MHW) 335 MDZ N45°06.32' W90°18.52' at fld. NOTAM FILE MDZ.

**MENOMONIE****MENOMONIE MUNI—SCORE FLD**

(LUM) 3 E UTC-6(-5DT) N44°53.54' W91°52.07'

**GREEN BAY**

895 B S4 FUEL 100LL, JET A NOTAM FILE GRB

H-21, L-141

RWY 09-27: H5074X75 (ASPH) MIRL

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 43'. Trees.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Road.

RWY 18-36: H3470X75 (ASPH) MIRL

RWY 18: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Road.

RWY 36: PAPI(2PR)—GA 3.0° TCH 40'. Ground.

**AIRPORT REMARKS:** Attended Mon-Fri 1500-2300Z†. ACTIVATE MIRL Rwy 09-27 and Rwy 18-36, PAPI Rwy 09, Rwy 27, Rwy 18 and Rwy 36, REIL Rwy 09, Rwy 18 and Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.025 (715) 235-5342.**COMMUNICATIONS:** CTAF/UNICOM 122.7

MINNEAPOLIS CENTER APP/DEP CON 125.3

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE EAU.

EAU CLAIRE (L) VORTACW 112.9 EAU Chan 76 N44°53.86' W91°28.71' 265° 16.6 NM to fld. 804/4E.

HIWAS.

**MERRILL MUNI**

(RRL) 1 NW UTC-6(-5DT) N45°11.94' W89°42.77'

**GREEN BAY**

1318 B S3 FUEL 100LL, JET A OX 4 NOTAM FILE RRL

H-21, L-141

RWY 07-25: H5100X75 (ASPH) S-45, D-65, ST-83, DT-100 MIRL

IAP

RWY 07: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 25: REIL. PAPI(P2L)—GA 3.0° TCH 40'. Trees.

RWY 16-34: H2997X75 (ASPH) S-26 MIRL 0.5% up N

RWY 16: Pole.

RWY 34: Trees.

**AIRPORT REMARKS:** Attended Sat 1400-2300Z†, Sun 1500-2200Z†, Oct-May, Mon-Fri 1400-2300Z†, June-Sep, Mon-Fri 1400-0100Z†. CAUTION: Deer on and in/ov arpt. Ultralight activity on and in/ov arpt. MIRL Rwy 07-25 preset on low ints, to increase ints and ACTIVATE REIL Rwy 07 and Rwy 25 and MIRL Rwy 16-34—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (715) 539-8422.**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 124.4

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE AUW.

WAUSAU (L) VORTACW 111.6 AUW Chan 53 N44°50.81' W89°35.19' 344° 21.8 NM to fld. 1205/2E.

NDB (MHW) 257 RRL N45°11.92' W89°42.26' at fld. NOTAM FILE RRL. NDB unusable byd 12 NM.

**MIDDLETON MUNI—MOREY FLD**

(C29) 5 NW UTC-6(-5DT) N43°06.86' W89°31.89'

**CHICAGO**

928 B S4 FUEL 100LL, JET A TPA-1928(1000) NOTAM FILE GRB

L-28G

RWY 10-28: H4000X100 (ASPH) MIRL

IAP

RWY 10: REIL PAPI(P2L)—GA 4.0° TCH 32'. Trees.

RWY 28: REIL. PAPI(P2L)—GA 4.0° TCH 36'. Pole.

RWY 01-19: 2000X120 (TURF)

**AIRPORT REMARKS:** Attended 1400-2330Z†. Birds on and in/ov arpt; especially during rainy periods. 135' crane ¼ mile east 1900-0400Z†, 240' crane ½ mile from AER 28 SR-SS, 230' crane 1 mile SE AER 28 and 240' crane 2.2 miles SW. Crane 80' AGL ¼ SM E of AER, unlgtd/unflagged. Avoid noise sensitive area 1 mile SW. Ctc arpt manager at 608-836-1711 for noise abatement procedures. ACTIVATE MIRL Rwy 10-28 and REIL Rwy 10 and Rwy 28—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

Ⓡ MADISON APP/DEP CON 135.45 (1200-0500Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z†)

GCO 121.725 (FLIGHT SERVICES and MADISON APP CON)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MSN.

MADISON (L) VORTACW 108.6 MSN Chan 23 N43°08.69' W89°20.38' 255° 8.6 NM to fld. 860/3E.

ILS/DME 110.35 I-CFQ Chan 40(Y) Rwy 10.

**MILWAUKEE**

N42°56.82' W87°53.82'

**CHICAGO**

RCO 122.65 122.4 (GREEN BAY RADIO) Unusable byd 30 NM blo 3000'.

L-28H, A



**MILWAUKEE****GENERAL MITCHELL INTL**

(MKE) 5 S UTC-6(-5DT) N42°56.83' W87°53.80'

723 B S4 FUEL 100LL, JET A OX 1 LRA ARFF Index—See Remarks

NOTAM FILE MKE

**CHICAGO**

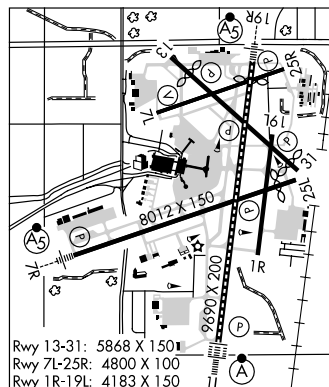
H-5E, L-28H, A

IAP, AD

**Rwy 01L-19R:** H9690X200 (ASPH-CONC-GRVD) S-100, D-185, ST-175, DT-350 HIRL, CL**Rwy 01L:** ALSF2, TDZL. PAPI(P4R)—GA 3.0° TCH 65'. Tree. 0.6% down.**Rwy 19R:** MALSR. PAPI(P4R)—GA 3.0° TCH 68'. Thld dspcd 785'. Fence.**Rwy 07R-25L:** H8012X150 (ASPH-CONC-GRVD) S-100, D-185, ST-175, DT-350 HIRL**Rwy 07R:** MALSR. PAPI(P4L)—GA 3.0° TCH 56'. Tree. 0.9% down.**Rwy 25L:** REIL. PAPI(P4L)—GA 3.0° TCH 50'. Thld dspcd 683'. Pole. 0.4% up.**Rwy 13-31:** H5868X150 (CONC) S-80, D-110, ST-139, DT-170. MIRL**Rwy 13:** REIL. PAPI(P4L)—GA 3.0° TCH 54'. Thld dspcd 741'. Pole.**Rwy 31:** REIL. PAPI(P4R)—GA 3.0° TCH 55'. Thld dspcd 534'. Railroad.**Rwy 07L-25R:** H4800X100 (ASPH) S-30, D-35, DT-55 MIRL**Rwy 07L:** REIL. VASI(V4L)—GA 3.1° TCH 37'. Tree.**Rwy 25R:** REIL. PAPI(P4R)—GA 3.0° TCH 40'. Pole.**Rwy 01R-19L:** H4183X150 (CONC) S-85, D-115, ST-146, DT-180 MIRL**Rwy 01R:** REIL.**Rwy 19L:** Tree.**AIRPORT REMARKS:** Attended continuously. Rwy 07L-25R CLOSED to all jet acft and acft design group BIII and larger.

Rwy 13-31 CLOSED turbojet acft without PPR from airport manager—call 414-747-5325. Rwy 01R CLOSED turbo jet tkf. Rwy 13-31 and Rwy 01R-19L and Rwy 07L-25R CLOSED except light weight single engine acft 0400-1200Z daily. Rwy 07L-25R no acft 65,000 lbs or greater taxi between Twy C and Twy E. All approaches are over noise sensitive areas; all turbojet acft should refrain from conducting multi VFR t/c pattern apchs and departures without prior approval from arpt manager call 414-747-5325. Training flights involving successive use of any rwy prohibited 0400-1200Z. Acft with wingspan greater than 158' cannot pass simultaneously on Twy A and Twy B between Twy R and Twy A3. Class I ARFF Index C. Index D equipment avbl upon req. Preferred usage by acft between 0400-1200Z is tkf Rwy 19R and ldg Rwy 01L. ASDE-X surveillance system in use: pilots should operate transponders with mode C on all twys and rwys. Birds on and in/ov arpt. Rwy 07L-25R and Rwy 01R-19L and Twy H, Twy J, Twy P not authorized under FAR Part 139 for scheduled ops involving air carrier acft designed for 10 or more passenger seats and scheduled/unscheduled air carrier ops involving acft designed for 31 or more passenger seats. Twy R3 clsd west of Twy R. Acft taxiing for departure on Rwy 25L via either Twy M or Rwy 13-31 should remain vigilant for the location of holding position signs/markings for Rwy 25L. Twy A clsd from Twy R to E and Twy E clsd from Twy T to M and Twy T clsd from Rwy 07R-25L to Twy E to DC10, B747, C-5 and MD11 during CAT II and CAT III ops. Twy B closed between Twy R and Twy A1 to DC8 acft and larger without prior permission from arpt manager at 414-747-5325. Twy D, D1, H, J, F (west of Twy Z and east of Rwy 01L-19R) closed to DC-9 acft and larger without PPR call arpt manager 414-747-5325. Twy V avbl for all type acft with 8450' avbl. Flight Notification Service (ADCUS) avbl. NOTE: See Special Notices

Section-Intersection Departures During Period of Darkness.

**WEATHER DATA SOURCES:** ASOS (414) 769-7161. TDWR.**COMMUNICATIONS:** D-ATIS 126.4 UNICOM 122.95**MILWAUKEE RCO** 122.65 122.4 (GREEN BAY RADIO) Unusable byd 30 NM bto 3000'.**MILWAUKEE APP CON** 127.85 127.0 126.5 (A) 118.0 (B)**MILWAUKEE DEP CON** 127.0 125.35 (A) 119.65 (B)**MILWAUKEE TOWER** 119.1 **GND CON** 121.8 **CLNC DEL** 120.8**AIRSPACE:** CLASS C svc continuous ctc APP CON**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 119° 19.9 NM to fld. 1080/2E. HIWAS.**YANKS NDB (MHV/LOM)** 260 BL N43°03.60' W87°52.61' 189° 6.8 NM to fld. Unmonitored.**TEELS NDB (MH/LOM)** 242 GM N42°54.54' W88°02.46' 072° 6.8 NM to fld. Unmonitored.**CAPPY NDB (LOM)** 410 MK N42°50.38' W87°54.78' 008° 6.5 NM to fld.**ILS** 110.3 I-MKE Rwy 01L. Class IIIIE. LOM CAPPY NDB. MM unmonitored.**ILS/DME** 111.5 I-GMF Chan 52 Rwy 07R. Class IE. LOM TEELS NDB.**ILS** 110.3 I-BLY Rwy 19R. Class IE. LOM YANKS NDB.**ILS/DME** 111.5 I-PXY Chan 52 Rwy 25L.**COMM/NAV/WEATHER REMARKS:** APP/DEP CON: (A) West of 01L-19R extended LOC course of active rwy and north of Rwy 07R-25L extended course of active rwy. (B) East of Rwy 01L-19R extended LOC course of active rwy and south of Rwy 07R-25L extended course of active rwy.

**LAWRENCE J. TIMMERMAN** (MWC) 5 NW UTC-6(-5DT) N43°06.62' W88°02.07'

CHICAGO

745 B S4 FUEL 100, JET A OX 1, 2 TPA-1745(1000) NOTAM FILE MWC

L-28H, A

RWY 15L-33R: H4103X75 (ASPH) S-30 MIRL

IAP, AD

RWY 15L: REIL. VASI(V4L)—GA 3.0° TCH 41'. Tree.

RWY 33R: VASI(V4L)—GA 3.0° TCH 26'. Tree.

RWY 15R-33L: 3231X270 (TURF)

RWY 15R: Tree.

RWY 33L: Tree.

RWY 04L-22R: H3201X75 (ASPH) S-30 MIRL

RWY 04L: REIL. VASI(V4L)—GA 4.0° TCH 44'. Tree.

RWY 22R: REIL. VASI(V4L)—GA 3.0° TCH 36'. Tree.

RWY 04R-22L: 2839X270 (TURF)

RWY 04R: Tree.

RWY 22L: Trees.

**AIRPORT REMARKS:** Attended May-Sep 1300-0400Z†, Oct-Apr 1300-0300Z†. Birds on and in/ov arpt. Turf Rwy 04R-22L, Rwy 15R-33L and all turf twys clsd 15 Oct-1 May. When twr clsd, ACTIVATE MIRL Rwy 04L-22R, VASI and REIL Rwy 04L and 22R, MIRL Rwy 15L-33R, VASI Rwy 15L and 33R, and REIL Rwy 15L—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 (414) 461-2954. LAWR5.

**COMMUNICATIONS:** CTAF 120.5 ATIS 128.3 UNICOM 122.95

TIMMERMAN RCO 123.6R 112.5T (GREEN BAY RADIO)

Ⓡ MILWAUKEE APP/DEP CON 128.7 (North)

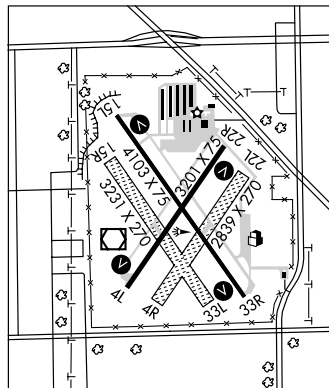
TIMMERMAN TOWER 120.5 (1300-0300Z†) GND CON 121.7 CLNC DEL 121.7 (when Twr clsd)

**AIRSPACE:** CLASS D svc 1300-0300Z† other times CLASS G.

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MWC.

TIMMERMAN (L) VOR/DME 112.5 LJT Chan 72 N43°06.59' W88°02.24' at fld. 737/2W.

ILS 108.5 I-MWC Rwy 15L. LOC only. Unmonitored when twr clsd.



**MINDI** N44°00.24' W91°15.65' NOTAM FILE LSE.

CHICAGO

NDB (LOM) 272 LS 177° 7.5 NM to La Crosse Muni.

**MINERAL POINT** N42°53.28' W90°13.59' NOTAM FILE MRJ.

CHICAGO

NDB (MHW) 365 MRJ at Iowa Co.

L-28G

## MINERAL POINT

**IOWA CO** (MRJ) 3 NW UTC-6(-5DT) N42°53.21' W90°14.18'

CHICAGO

1171 B S4 FUEL 100LL, JET A OX 4 NOTAM FILE MRJ

H-5D, L-28G

RWY 11-29: H5000X75 (ASPH) MIRL 0.7% up SE

IAP

RWY 11: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

RWY 29: REIL. PAPI(P2L)—GA 3.0° TCH 40'.

RWY 04-22: H3601X60 (ASPH) S-12.5 MIRL

RWY 04: PAPI(P2L)—GA 3.0° TCH 31'. Road.

RWY 22: PAPI(P2L)—GA 3.0° TCH 31'.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2300Z†, Sat 1400-1800Z†, Sun on call. For attendant call 608-553-7571 or 608-341-8455. Fuel avbl 24 hour self service. Call pager 608-376-4464 or self service. For service information call 608-987-9931/608-574-2294. Birds on and in/ov of arpt. Be alert: Acft taxiing on Rwy 04-22 and 11-29. For noise abatement preferred no wind rwy is Rwy 29. Rwy 22 VASI OTS indef. MIRL Rwy 11-29 preset on low ints, to increase ints and ACTIVATE MIRL Rwy 04-22, PAPI Rwy 04, Rwy 22, Rwy 11 and Rwy 29, REIL Rwy 11 and Rwy 29—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.525 (608) 987-2157.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ CHICAGO CENTER APP/DEP CON 133.95

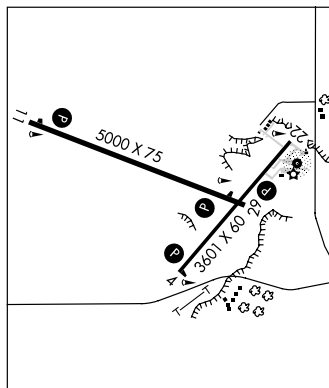
GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNR.

LONE ROCK (L) VOR/DME 112.8 LNR Chan 75 N43°17.66' W90°07.99' 191° 24.9 NM to fld. 1184/OE.

HIWAS.

MINERAL POINT NDB (MHW) 365 MRJ N42°53.28' W90°13.59' at fld. NOTAM FILE MRJ.



**MINOCQUA-WOODRUFF****LAKELAND/NOBLE F LEE MEML FLD** (ARV) 3 NW UTC-6(-5DT) N45°55.68' W89°43.86'**GREEN BAY**

1629 B S2 FUEL 100LL, JET A1 + TPA-2629(1000) NOTAM FILE ARV

H-2J, L-14J

RWY 18-36: H5150X100 (ASPH) S-90, D-150 HIRL (NSTD).

IAP

RWY 18: REIL. VASI(V4L)—GA 3.0° TCH 44'.

RWY 36: MALSR. REIL. VASI(V4L)—GA 3.0° TCH 45'. Trees.

RWY 10-28: H3602X75 (ASPH) S-35 MIRL

RWY 10: Trees.

RWY 28: REIL. PAPI(P2L)—GA 3.0° TCH 37'. Trees.

**AIRPORT REMARKS:** Attended Oct-May 1400-2300Z†, Jun-Sep

1300-0000Z†. For attendant other hrs call 715-356-3891 or

715-356-2972. Deer on and in/ov arpt. HIRL Rwy 18-36 preset

on low ints, to increase ints and ACTIVATE MIRL Rwy 10-28; REIL

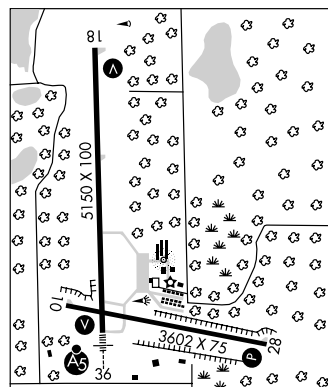
Rwy 18, Rwy 28 and Rwy 36; VASI Rwy 18; Rwy 36; PAPI Rwy 28

and MALSR Rwy 36—CTAF. Rwy 18-36 NSTD HIRL; NSTD thld lgts

MAL type thld lgt bar in addition to standard lighting.

**WEATHER DATA SOURCES:** AWOS-3 121.125 (715) 356-2417.**COMMUNICATIONS:** CTAF/UNICOM 122.7**WOODRUFF RCO** 122.6 (GREEN BAY RADIO)**(R) MINNEAPOLIS CENTER APP/DEP CON** 133.65**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

RHINELANDER (L) VORTAC 109.2 RHI Chan 29 N45°38.03'

W89°27.47' 325° 21.1 NM to fld. 1590/2E. **HIWAS.****ARBOR VITAE NDB (MHW)** 221 ARV N45°55.57' W89°43.76' at fld. NOTAM FILE ARV.**DOUGY NDB (MHW/LOM)** 236 DO N45°50.07' W89°43.83' 001° 5.6 NM to fld. NDB unmonitored.**ILS/DME** 111.7 I-DOF Chan 54 Rwy 36. LOM DOUGY NDB. LOC only. LOC/DME unmonitored.**MONAH** N43°03.76' W89°20.75' NOTAM FILE MSN.**CHICAGO****NDB (MHW/LOM)** 400 MS 005° 4.6 NM to Dane Co Rgnl-Truax Fld. Unmonitored

L-28H

when twr clsd.

**MONROE MUNI** (EFT) 3 NE UTC-6(-5DT) N42°36.89' W89°35.42'**CHICAGO**

1086 B S4 FUEL 100LL, JET A NOTAM FILE EFT

H-5D, L-28G

RWY 12-30: H5000X75 (ASPH-AFSC) S-12.5 MIRL

IAP

RWY 12: REIL. PAPI(P2L)—GA 3.15° TCH 40'. Tree.

RWY 30: REIL. PAPI(P2L)—GA 3.0° TCH 30'. Tree.

RWY 02-20: H3000X75 (ASPH) MIRL 0.9% up N

RWY 02: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Tree.

RWY 20: REIL. Tree.

**AIRPORT REMARKS:** Attended Apr-Oct 1300-2300Z†, Nov-Mar 1400-2200Z†. For attendant after hrs call

608-329-7777. Ultralight activity on and in/ov arpt. MIRL Rwy 12-30 ops low ints, to increase ints and

ACTIVATE REIL Rws 12 and 30 and Rws 02 and 20 and PAPI Rws 02 and 30 and MIRL Rwy 02-20—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.375 (608) 328-8359.**COMMUNICATIONS:** CTAF/UNICOM 123.05

**MOSINEE****CENTRAL WISCONSIN** (CWA) 3 SE UTC-6(-5DT) N44°46.66' W89°40.01'**GREEN BAY**

1277 B S4 FUEL 100LL JET A OX 1 Class I, ARFF Index A NOTAM FILE CWA

H-2J, L-14J

RWY 08-26: H7647X150 (CONC-GRVD) S-95, D-160, ST-175, DT-270 HIRL

IAP, AD

RWY 08: MALSR. RWY 26: REIL. PAPI(P4L)—GA 3.0° TCH 49'.

RWY 17-35: H6500X150 (CONC-GRVD) S-75, D-105, ST-133, DT-180 HIRL 0.7° up N

RWY 17: REIL. VASI(V4L)—GA 3.0° TCH 42'. RWY 35: MALSR.

**LAND AND HOLD SHORT OPERATIONS**

| LANDING | HOLD SHORT POINT | DIST AVBL |
|---------|------------------|-----------|
| RWY 26  | 17-35            | 7300      |
| RWY 35  | 08-26            | 5000      |

**RUNWAY DECLARED DISTANCE INFORMATION**

|         |           |           |           |          |
|---------|-----------|-----------|-----------|----------|
| RWY 08: | TORA-7647 | TODA-7647 | ASDA-7647 | LDA-7647 |
| RWY 17: | TORA-6500 | TODA-6500 | ASDA-6500 | LDA-6500 |
| RWY 26: | TORA-7647 | TODA-7647 | ASDA-7647 | LDA-7647 |
| RWY 35: | TORA-6500 | TODA-6500 | ASDA-6500 | LDA-6500 |

**AIRPORT REMARKS:** Attended 1100-0300Z†. 48 hr PPR for unscheduled

air carrier ops with more than 30 passenger seats call arpt manager 715-693-2147. Twy E; north of Twy C is not avbl for air carrier ops over 60000 pounds. When twr closed ACTIVATE MALSR Rwy 08 and Rwy 35—CTAF. ACTIVATE HIRL Rwys 17-35, Rwy 08-26, and PAPI Rwy 26—CTAF. VASI Rwy 17 operates 24 hrs. Rwy 17 REIL OTS indef. Lnd fee for acft providing commercial svcs.

**WEATHER DATA SOURCES:** AWOS-3 127.45 (715) 693-1116**COMMUNICATIONS:** CTAF 119.75 ATIS 127.45 UNICOM 122.95

MOSINEE RCO 122.525 (GREEN BAY RADIO)

Ⓡ MINNEAPOLIS CENTER APP/DEP CON 124.4

CWA TOWER 119.75 (1200-0400Z†) GND CON 121.9

**AIRSPACE:** CLASS D svc 1200-0400Z† other times CLASS E.**RADIO AIDS TO NAVIGATION:** NOTAM FILE AUW.

WAUSAU (L) VORTACW 111.6 AUW Chan 53 N44°50.81' W89°35.19' 218° 5.4 NM to or fld. 1205/2E.

STEVENS POINT (L) VORTAC 110.6 STE Chan 43 N44°32.60' W89°31.83' 339° 15.2 NM to fld. 1110/2E.

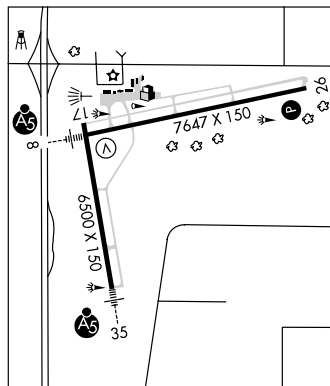
NOTAM FILE STE. HIWAS.

BAYYE NDB (LOM) 351 PH N44°40.59' W89°38.88' 353° 6.1 NM to fld.

DANCI NDB (LOM) 275 CW N44°45.62' W89°47.35' 079° 5.3 NM to fld.

ILS/DME 110.3 I-CWA Chan 40 Rwy 08. Class IA. LOM DANCI NDB.

ILS/DME 110.9 I-PHS Chan 46 Rwy 35. Class IE. LOM BAYYE NDB.

**NECEDAH** (DAF) 1 NW UTC-6(-5DT) N44°02.01' W90°05.11'**GREEN BAY**

919 B S2 TPA-1919(1000) NOTAM FILE GRB

L-28G

RWY 18-36: H2700X60 (ASPH) LIRL 0.3% up S

IAP

RWY 18: Trees. RWY 36: Trees.

**AIRPORT REMARKS:** Unattended. During winter months call 608-565-7248 before ldg to determine status. ACTIVATE

LIRL Rwy 18-36—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

Ⓡ VOLK APP/DEP CON 135.25 (Mon-Fri 1400-2200Z† except holidays), other times ctc

Ⓡ CHICAGO CENTER APP/DEP CON 133.3

**RADIO AIDS TO NAVIGATION:** NOTAM FILE STE.

STEVENS POINT (L) VORTAC 110.6 STE Chan 43 N44°32.60' W89°31.83' 219° 38.8 NM to fld. 1110/2E.

HIWAS.

**NEENAH****BRENNAND** (79C) 4 SW UTC-6(-5DT) N44°09.60' W88°33.57'**GREEN BAY**

850 S4 FUEL 100LL NOTAM FILE GRB

RWY 18-36: H2450X20 (ASPH) LIRL(NSTD)

RWY 18: Thld dspld 188'. Trees. RWY 36: Thld dsplcd 275'.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2230Z†, Sat 1400-1800Z†. Call 920-475-6179 for repair. Rwy 18-36 has 2 flashing lgts 75' N of Rwy 18 thld and 15' S of Rwy 36 thld. Rwy 18-36 NSTD LIRL 1 thld lgt each side of thld. Rwy 18 and Rwy 36 white bar and centerline. ACTIVATE NSTD LIRL Rwy 18-36 5 clicks on 8 clicks off—CTAF.

**COMMUNICATIONS:** CTAF 122.9

**NEILLSVILLE MUNI** (VIQ) 3 E UTC-6(-5DT) N44°33.49' W90°30.73'

GREEN BAY

1237 B S2 FUEL 100LL, MOGAS NOTAM FILE GRB

L-141

RWY 09-27: H3400X60 (ASPH) S-12 LIRL 0.9% up E

IAP

RWY 09: VASI(V2L)—GA 3.0° TCH 31'. Tree.

RWY 27: VASI(V2L)—GA 3.5° TCH 25'. Tree.

AIRPORT REMARKS: Attended 1400-2300Z±. Fuel avbl PPR, call 715-743-4400. PPR for hangar space call

715-743-4400. Rotating bcn OTS indef. LIRL Rwy 09-27 ops low ints, to increase ints and ACTIVATE VASI Rwys 09 and 27—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

④ MINNEAPOLIS CENTER APP/DEP CON 124.4

RADIO AIDS TO NAVIGATION: NOTAM FILE STE.

STEVENS POINT (L) VORTAC 110.6 STE Chan 43 N44°32.60' W89°31.83' 273° 42.1 NM to fld. 1110/2E.

HIWAS.

NDB (MHW) 368 VIQ N44°33.43' W90°30.91' at fld. Unmonitored. NOTAM FILE GRB.

**NEPCO** N44°15.59' W89°53.27' NOTAM FILE ISW.

GREEN BAY

NDB (LOM) 326 EK 020° 6.4 NM to Alexander Fld South Wood Co. Unmonitored.

**NEST OF EAGLES** (See SPOONER)**NEW HOLSTEIN MUNI** (8D1) 1 W UTC-6(-5DT) N43°56.66' W88°06.81'

CHICAGO

992 B S4 FUEL 100LL TPA-1792(800) NOTAM FILE GRB

L-28H

RWY 14-32: H3600X75 (ASPH) S-20 MIRL

IAP

RWY 14: REIL(NSTD). Road.

RWY 32: REIL(NSTD). Ground.

RWY 04-22: 2970X250 (TURF)

RWY 04: Tree.

RWY 22: Trees. Rgt tfc.

AIRPORT REMARKS: Attended 1500-2300Z±. Rwy 04-22 CLOSED Nov 1

thru May 1. Numerous birds invof arpt. ACTIVATE MIRL Rwy 14-32

and REILS Rwy 14 and Rwy 32—CTAF.

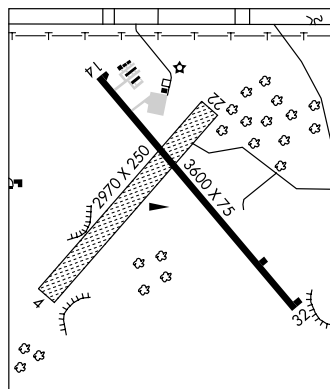
COMMUNICATIONS: CTAF/UNICOM 123.0

④ MILWAUKEE APP/DEP CON 127.0

RADIO AIDS TO NAVIGATION: NOTAM FILE OSH.

OSHKOSH (L) VORTAC 111.8 OSH Chan 55 N43°59.43'

W88°33.36' 096° 19.4 NM to fld. 780/2E.

**NEW LISBON****MAUSTON-NEW LISBON UNION** (82C) 3 SE UTC-6(-5DT) N43°50.32' W90°08.26'

CHICAGO

106 B S2 FUEL 100LL, JET A NOTAM FILE GRB

L-28G

RWY 14-32: H3686X75 (ASPH) MIRL

IAP

RWY 14: PAPI(P2L)—GA 3.5° TCH 30'. Road.

RWY 32: PAPI(P2L)—GA 4.0° TCH 26'. Trees.

AIRPORT REMARKS: Unattended. For fuel and repairs etc

608-562-3374. Deer on and invof arpt. Rwy 14-32 298' paved

stopway SE end. Rwy 14 PAPI OTS indef. ACTIVATE MIRL Rwy

14-32-122.8.

COMMUNICATIONS: CTAF 122.9

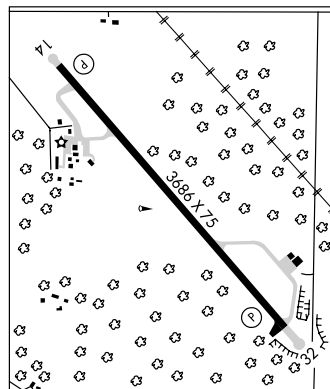
VOLK APP/DEP CON 135.25 (Mon-Fri 1400-2200Z± except holidays),  
other times ctc

④ CHICAGO CENTER APP/DEP CON 133.3

RADIO AIDS TO NAVIGATION: NOTAM FILE DLL.

DELLS (H) VORTAC 117.0 DLL Chan 117 N43°33.05'

W89°45.82' 314° 23.7 NM to fld. 1020/3E.



**NEW RICHMOND RGNL** (RNH) 2 N UTC-6(-5DT) N45°08.87' W92°32.35'

GREEN BAY

998 B S4 FUEL 100LL JET A OX 4 TPA-1998(1000) NOTAM FILE RNH

H-21, L-141, A

RWY 14-32: H5507X75 (ASPH) S-12 MIRL

IAP

RWY 14: REIL. PAPI(P4L)—GA 3.0° TCH 40'. RWY 32: REIL. PAPI(P4L)—GA 3.0° TCH 20'. Pole.

RWY 04-22: 2050X75 (TURF) 0.3% up NE

**AIRPORT REMARKS:** Attended continuously. 24 hr self fuel avbl for credit card users or call 715-246-7251. Seaplane t/c adjacent to S side of arpt. Deer and birds on and in/ov arpt. Aerobatic practice area 4NM NE of arpt. Ultralight activity on and in/ov arpt. Turbo-jet touch and go not authorized. Bright lghts from ball fields ½ mile S during evenings May thru Sep. Rwy 04-22 open to ski equipped acft winter months. Rwy distance markers on Rwy 14. Automobile and pedestrian access onto arpt property restricted by security fencing and gates from 0400-1200Z+. Contact arpt manager 715-246-7735 for access instructions. Rwy 32 VASI unusable byd 4° right of course. MIRL Rwy 14-32 preset on low inst; to increase ints and ACTIVATE PAPI and REIL Rws 14 and 32—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 120.0 (715) 246-3202.**COMMUNICATIONS:** CTAF/UNICOM 122.975

® MINNEAPOLIS APP/DEP CON 121.2

GCO 121.725 (MINNEAPOLIS APP CON and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PNM.

GOPHER (H) VORTACW 117.3 GEP Chan 120 N45°08.74' W93°22.39' 084° 35.4 NM to fld. 877/6E.

HIWAS.

NDB (MHW) 257 RNH N45°08.84' W92°32.01' at fld. NOTAM FILE RNH.

**NORTH COUNTRY SPB** (See SOLON SPRINGS)**OCONTO** N44°52.55' W87°54.74' NOTAM FILE GRB.

GREEN BAY

NDB (MHW) 388 OCQ at J. Douglas Bake Meml. NDB unusable 220°-360°.

L-31A

**OCONTO****J. DOUGLAS BAKE MEML** (OCQ) 2 SW UTC-6(-5DT) N44°52.45' W87°54.58'

GREEN BAY

604 B FUEL 100LL NOTAM FILE GRB

L-31A

RWY 11-29: H3199X75 (ASPH) S-40, D-55, DT-90 MIRL

IAP

RWY 11: REIL. Tree. RWY 29: Trees.

RWY 04-22: 1845X150 (TURF)

RWY 04: Trees. RWY 22: Trees.

**AIRPORT REMARKS:** Attended 1400-2000Z+. 24 hour fuel avbl. Migratory waterfowl on and in/ov arpt. Confirm winter rwy conditions and snow removal with arpt manager 920-834-7727. Rwy 04-22 not plowed Nov-Apr. ACTIVATE MIRL Rwy 11-29-122.8. Rwy 11 REIL OTS indef. Rwy 04-22 thlds marked with white cones.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

® GREEN BAY APP/DEP CON 119.5 (1130-0530Z+)

® MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z+)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.

GREEN BAY (H) VORTACW 115.5 GRB Chan 102 N44°33.31' W88°11.69' 031° 22.7 NM to fld. 767/1E.

HIWAS.

OCONTO NDB (MHW) 388 OCQ N44°52.55' W87°54.74' at fld. NDB unusable 220°-360°.

**SWEETWATER BAY SPB** (30W) 6 NE UTC-6(-5DT) N44°57.12' W87°48.51'

GREEN BAY

579 NOTAM FILE GRB

**WATERWAY ALL WAY:** 10000X250 (WATER)

**SEAPLANE REMARKS:** Attended irregularly. Apch from the W or NW over western shoreline; trees up to 85' along shoreline.

**COMMUNICATIONS:** CTAF 122.9

**OSCEOLA****L.O. SIMENSTAD MUNI** (OEO) 0 SE UTC-6(-5DT) N45°18.57' W92°41.40'

903 B S4 FUEL 100LL, JET A TPA-1903(1000) NOTAM FILE GRB

**RWY 10-28:** H5005X75 (ASPH) S-20, D-30 MIRL 0.4% up E**RWY 10:** PAPI(P2L)—GA 3.0° TCH 35'. Road.**RWY 28:** REIL. PAPI(P4L)—GA 3.0° TCH 37'.**RWY 04-22:** 2270X150 (TURF) 0.3% up SW

**AIRPORT REMARKS:** Attended Apr-Oct 1500-2200Z†, Nov-Mar irregularly. Self svc fuel avbl 24 hrs. Extensive flight training, glider and ultralight. Deer and birds on and invof arpt. PAEW on and adjacent to arpt sfcs. Rwy 04-22 CLOSED 1 Dec-15 Apr. Rwy 04-22 CLOSED to wheeled acft when covered with snow or ice; open to ski equipped acft during winter months. Ctc arpt manager 612-327-3297. Avoid overflight of St. Croix River National Scenic Bi-way blo 2000' AGL. MIRL Rwy 10-28 preset on low ints dusk to dawn to incr ints ACTIVATE PAPI Rwy 10 and Rwy 28 and REIL Rwy 28—CTAF. Reflectors on twy. Rwy 04-22 marked with yellow cones.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (715) 294-3845. Wind unreliable.

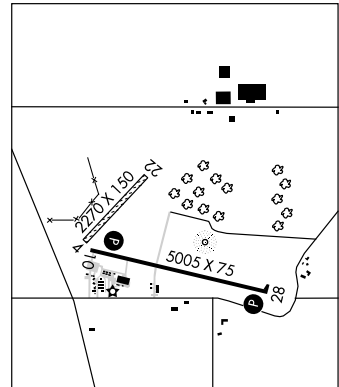
**COMMUNICATIONS:** CTAF 122.9

Ⓡ **MINNEAPOLIS APP/DEP CON** 121.2.

GCO 121.725 (MINNEAPOLIS CLNC and FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE PNM.

**GOPHER (H) VORTACW** 117.3 GEP Chan 120 N45°08.74' W93°22.39' 065° 30.6 NM to fld. 877/6E.  
HIWAS.



**GREEN BAY**  
H-2I, L-14I, A  
IAP

**OSHKOSH** N43°59.43' W88°33.36' NOTAM FILE OSH.

(L) VORTAC 111.8 OSH Chan 55 at Wittman Rgnl. 780/2E.

RCO 122.25 122.1R 111.8T (GREEN BAY RADIO)

**CHICAGO**  
L-28H

**OSHKOSH****WITTMAN RGNL** (OSH) 2 S UTC-6(-5DT) N43°59.06' W88°33.42'**CHICAGO**

808 B S4 FUEL 100LL, JET A OX 1, 2 TPA-1808(1000) NOTAM FILE OSH

H-21, L-28H

**RWY 18-36:** H8002X150 (CONC-GRVD) S-65, D-85, ST-107,

IAP, AD

DT-130 HIRL

**RWY 18:** REIL. VASI(V4L)—GA 3.0° TCH 47'.**RWY 36:** MALSR. PAPI(P4L)—GA 3.0° TCH 52'. 0.3% down.**RWY 09-27:** H6178X150 (ASPH-GRVD) S-75, D-125, ST-159,

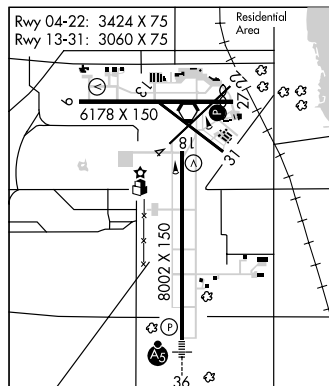
DT-185 HIRL 0.4% up W

**RWY 09:** REIL. VASI(V4L)—GA 3.0° TCH 50'. Pole.**RWY 27:** REIL. PAPI(P4L)—GA 3.0° TCH 47'. Thld dsplcd 531'.

Trees.

**RWY 04-22:** H3424X75 (ASPH) AUW-50 0.4% up SW**RWY 04:** Pole. **RWY 22:** Pole.**RWY 13-31:** H3060X75 (ASPH) AUW-50**RWY 31:** Pole.

**AIRPORT REMARKS:** Attended 1300-0200Z†. For arpt attendant other hrs call 920-236-7820. Birds on and invov arpt especially gulls. Rwy 13-31 and Rwy 04-22; Twys C; H and P not avbl to air carrier ops with more than 30 passenger seats. Rwy 13-31 and Rwy 04-22 have heavy cracking and vegetation growing through rwy surface, full length. Rwy 22 and Rwy 27 apch ends are closely aligned. Verify correct rwy and compass heading prior to departure. When twr clsd HIRL Rwy 09-27 preset on med ints; to increase ints and ACTIVATE HIRL Rwy 18-36; MALSR Rwy 36 and PAPI Rwy 27—CTAF.

**WEATHER DATA SOURCES:** ASOS (920) 426-1644. LAWRS.**COMMUNICATIONS:** CTAF 118.5 ATIS 125.9 UNICOM 122.95**OSHKOSH RCO** 122.25 122.1R 111.8T (GREEN BAY RADIO)® **MILWAUKEE APP/DEP CON** 127.0**OSHKOSH TOWER** 118.5 (1200-0400Z†) **GND CON** 121.9**AIRSPACE:** CLASS D svc 1200-0400Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSH.**OSHKOSH (L) VORTAC** 111.8 OSH Chan 55 N43°59.43' W88°33.36' at fld. 780/2E.**POBER NDB (LOM)** 395 OS N43°52.43' W88°33.46' 358° 6.6 NM to fld. Unmonitored.**ILS** 110.5 I-OSH Rwy 36 Class IT. LOM POBER NDB.**COMM/NAV/WEATHER REMARKS:** LOC/GS unmonitored when twr clsd. LOM/OM unmonitored.**OUTAGAMIE CO** (See APPLETON)**PALMYRA MUNI** (88C) 0 NW UTC-6(-5DT) N42°53.01' W88°35.85'**CHICAGO**

851 S4 FUEL 100LL, MOGAS NOTAM FILE GRB

**RWY 09-27:** 2800X200 (TURF) LIRL**RWY 27:** Tree.**AIRPORT REMARKS:** Unattended. For fuel call 262-495-4342. Crane 190' AGL 300' south of AER 09 SR-SS.

ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09-27 marked by yellow cones.

**COMMUNICATIONS** CTAF 122.9



**PARK FALLS MUNI** (PKF) 2 NE UTC-6(-5DT) N45°57.30' W90°25.47'

GREEN BAY

1500 B FUEL 100LL, MOGAS NOTAM FILE GRB

L-141

RWY 18-36: H3200X60 (ASPH) S-20 MIRL 0.3% up S

IAP

RWY 18: PAPI(P2L)—GA 3.0 TCH 29'. Trees.

RWY 36: PAPI(P2L)—GA 3.0 TCH 29'. Trees.

**AIRPORT REMARKS:** Attended irregularly. For fuel call 715-762-3971.

PAEW on and adjacent to arpt sfcs. Rotating bcn OTS indef. Rwy

18-36 has loose snow over thin packed snow until spring.

ACTIVATE MIRL Rwy 18-36—CTAF.

**COMMUNICATIONS:** CTAF 122.9

② MINNEAPOLIS CENTER APP/DEP CON 133.65

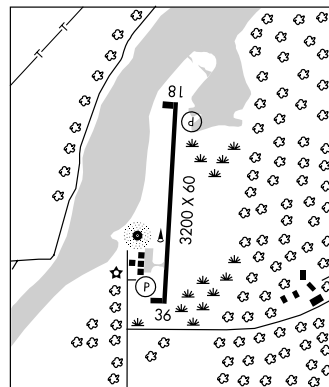
**RADIO AIDS TO NAVIGATION:** NOTAM FILE IWD.

IRONWOOD (L) VORTACW 108.8 IWD Chan 25 N46°31.94'

W90°07.55' 199° 36.8 NM to fld. 1230/1E. HIWAS.

NDB (MHW) 371 PKF N45°57.18' W90°25.57' at fld. NDB

unmonitored. NOTAM FILE GRB.

**PASER** N42°40.95' W87°53.97' NOTAM FILE RAC.

CHICAGO

NDB (MHW/LOM) 206 RA 041° 6.0 NM to John H. Batten. Unmonitored.

A

NDB unusable by 10 NM.

**PHILLIPS** N45°42.18' W90°24.74' NOTAM FILE PBH.

GREEN BAY

NDB (MHW) 263 PBH at Price Co.

L-141

RCO 122.05 (GREEN BAY RADIO)

**PHILLIPS****PRICE CO** (PBH) 1 NW UTC-6(-5DT) N45°42.54' W90°24.15'

GREEN BAY

1497 B S4 FUEL 100LL, JET A, MOGAS NOTAM FILE PBH

H-2J, L-141

RWY 01-19: H5000X75 (ASPH) D-60 MIRL 0.6% up N

IAP

RWY 01: REIL. PAPI(P4L)—GA 3.0° TCH 35'.

RWY 19: REIL. PAPI(P4L)—GA 3.0° TCH 30'. Trees.

RWY 06-24: H3950X75 (ASPH) S-28, D-40 MIRL.

RWY 06: VASI(V2L)—GA 3.0° TCH 47'. Tree.

RWY 24: REIL. VASI(V2L)—GA 3.0° TCH 45'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2230Z†, Sat

1500-2230Z†, Sun 1600-2230Z†. Fuel avbl 24 hrs with credit

card. Birds on and invof arpt. Rwy 19 PAPI OTS indef. ACTIVATE

MIRL Rwy 06-24 and Rwy 01-19 and VASI Rwy 06 and 24; PAPI

Rwy 01 and 19; REIL Rwy 01, Rwy 19 and Rwy 24—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 125.875 (715) 339-4520.**COMMUNICATIONS:** CTAF/UNICOM 122.8

PHILLIPS RCO 122.05 (GREEN BAY RADIO)

MINNEAPOLIS CENTER APP/DEP CON 133.65

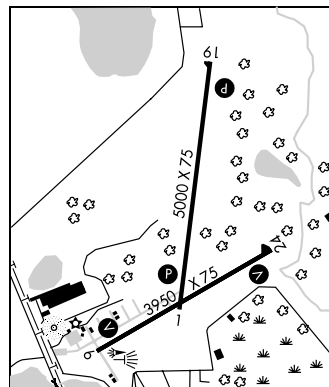
**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

RHINELANDER (L) VORTAC 109.2 RHI Chan 29 N45°38.03'

W89°27.47' 275° 40 NM to fld. 1590/2E. HIWAS.

PHILLIPS NDB (MHW) 263 PBH N45°42.18' W90°24.74' at fld.

NOTAM FILE PBH.

**PISO** (See SURING)

**PLATTEVILLE MUNI** (PVB) 3 SE UTC-6(-5DT) N42°41.36' W90°26.66'

CHICAGO

1025 B FUEL 100LL, JET A NOTAM FILE GRB

L-286

RWY 15-33: H3999X75 (ASPH) S-12.5 MIRL

IAP

RWY 15: REIL. RWY 33: REIL. PAPI(2PL)—GA 3.0° TCH 25'.

RWY 07-25: H3599X75 (ASPH) S-30, D-35 MIRL 0.6% up NE.

RWY 25: Road.

**AIRPORT REMARKS:** Attended Apr-Sep 1330-0130Z†, Oct-Mar 1330-2330Z†. 24 hr self svc fuel avbl with credit card. ACTIVATE MIRL Rwy 15-33 and Rwy 07-25; REIL Rwy 15 and Rwy 33—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 120.575 (609) 348-3637.**COMMUNICATIONS:** CTAF/UNICOM 122.7

RCO 122.5 (GREEN BAY RADIO).

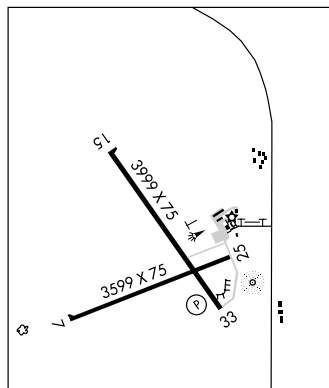
Ⓡ CHICAGO CENTER APP/DEP CON 133.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE DBQ.

DUBUQUE (H) VORTACW 115.8 DBQ Chan 105 N42°24.09'

W90°42.54' 030° 20.9 NM to fld. 1051/4E.

NDB (MHW) 203 PVB N42°41.27' W90°26.18' at fld. NOTAM FILE GRB.

**POBER** N43°52.43' W88°33.44' NOTAM FILE OSH.

CHICAGO

NDB (LOM) 395 OS 358° 6.6 NM to Wittman Rgnl. Unmonitored.

**PORTAGE MUNI** (C47) 2 NW UTC-6(-5DT) N43°33.62' W89°28.97'

CHICAGO

825 B FUEL 100LL, MOGAS TPA-1825(1000) NOTAM FILE GRB

L-286

RWY 17-35: H3775X60 (ASPH) MIRL (NSTD) 0.3% up S

IAP

RWY 17: REIL(NSTD). PVASI(PSIL). Thld dspcd 103'. Road.

RWY 35: Thld dspcd 262'. Road.

RWY 04-22: H2560X40 (ASPH) 0.3% up SW

RWY 04: Thld dspcd 60'. Road.

RWY 22: Road.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2200Z†, Sat-Sun 1600-2200Z†. Fuel avbl 24 hrs with credit card. Rwy 04-22 CLOSED Nov 15 to Apr 15, rwy not plowed during winter. 115' crane 200' southwest Rwy intersection Mon-Thu 1900-0400Z†. PAEW AER 04 indef. Numerous deer on and invof arpt. Rwy 04-22 severe cracking and plants growing thru pavement. P-line 110' AGL 1580' from dspcd thld Rwy 35. Rwy 35 large hangars and trees 200' W of rwy cause wind shear with strong NW winds. Rwy 17-35 NSTD MIRL. Rwy 17 first 100' not lgtd; Rwy 35 first 193' not lgtd. Rwy 04-22 marked with numbers only.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

DELLS RCO 122.1R 117.0T (GREEN BAY RADIO)

Ⓡ MADISON APP/DEP CON 135.45 120.1 (1200-0500Z†)

Ⓡ CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z†)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLL.

DELLS (H) VORTAC 117.0 DLL Chan 117 N43°33.05' W89°45.82' 084° 12.3 NM to fld. 1020/3E.

**PRAIRIE DU CHIEN MUNI** (PDC) 2 SE UTC-6(-5DT) N43°01.16' W91°07.42'

CHICAGO

661 B FUEL 100LL, JET A TPA-1661(1000) NOTAM FILE PDC

H-5D, L-286

RWY 14-32: H5000X75 (ASPH) S-30, D-60 MIRL

IAP

RWY 14: REIL. PAPI(P2L)—GA 3.0° TCH 28'. Pole.

RWY 32: REIL. PAPI(P2L)—GA 4.0° TCH 30'. Trees.

RWY 11-29: H3999X75 (ASPH) S-24, D-40 MIRL

RWY 11: Stack.

RWY 29: Trees.

**AIRPORT REMARKS:** Attended 1600-2200Z†. Fuel 24 hr self svc. ACTIVATE MIRL Rwy 11-29, Rwy 14-32, PAPI Rwy 14 and Rwy 32 and REIL Rwy 14 and Rwy 32—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.925 (608) 326-9122.**COMMUNICATIONS:** CTAF/UNICOM 122.8

RCO 122.25 (GREEN BAY RADIO).

Ⓡ CHICAGO CENTER APP/DEP CON 133.95

**RADIO AIDS TO NAVIGATION:** NOTAM FILE FOD.

WAUKON (L) VORTAC 116.6 UKN Chan 113 N43°16.81' W91°32.24' 126° 24 NM to fld. 1288/5E.

**PRAIRIE DU SAC****SAUK-PRAIRIE** (91C) 2 W UTC-6(-5DT) N43°17.87' W89°45.35'**CHICAGO**

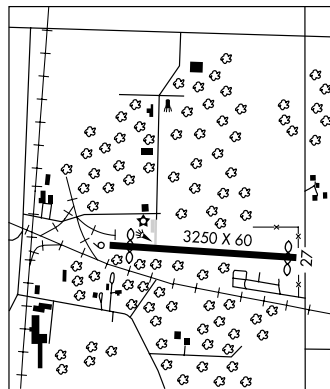
832 B S4 NOTAM FILE GRB

**L-286****RWY 18-36:** H2936X3 (ASPH) LIRL 0.4% up N**IAP****RWY 18:** REIL(NSTD). **RWY 36:** REIL. Tree.**AIRPORT REMARKS:** Unattended. Ultralight activity on and in vof arpt. Maintenance vehicle t/c on and in vof arpt. W ramp and twy pvt, clsd transient. ACTIVATE LIRL Rwy 18-36 and REIL Rwy 18 and Rwy 36—CTAF.**COMMUNICATIONS:** CTAF 122.9Ⓡ **MADISON APP/DEP CON** 135.45 (1200-0500Z‡)Ⓡ **CHICAGO CENTER APP/DEP CON** 133.3 (0500-1200Z‡)**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLL.**DELLS (H) VORTAC** 117.0 DLL Chan 117 N43°33.05' W89°45.82' 176° 15.2 NM to fld. 1020/3E.**PRENTICE** (5N2) 1 E UTC-6(-5DT) N45°32.58' W90°16.76'**GREEN BAY**

1578 B NOTAM FILE GRB

**L-141****RWY 09-27:** H3250X60 (ASPH) MIRL**RWY 09:** Thld dsplcd 350'. Railroad.**RWY 27:** Thld dsplcd 120'. Tree.**AIRPORT REMARKS:** Unattended. ACTIVATE twy and MIRL Rwy 09-27—CTAF.**COMMUNICATIONS:** CTAF/UNICOM 123.0**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.**RHINELANDER (L) VORTAC** 109.2 RHI Chan 29 N43°38.03'

W89°27.47' 259° 35 NM to fld. 1590/2E. HIWAS.

**PRICE CO** (See PHILLIPS)**PULASKI****CARTER** (92C) 2 S UTC-6(-5DT) N44°38.47' W88°12.91'**GREEN BAY**

785 S4 FUEL 100LL, MOGAS TPA-1585(800) NOTAM FILE GRB

**L-31A****RWY 12-30:** H2555X30 (ASPH) LIRL (NSTD) 0.3% up NW**IAP****RWY 12:** Thld dsplcd 375'. Tree.**RWY 30:** Thld dsplcd 130'. Trees.**RWY 03-21:** 1610X80 (TURF)**RWY 03:** Road.**RWY 21:** Road.**AIRPORT REMARKS:** Attended daltg hrs. Parachute Jumping. Ultralight flying on and in vof arpt. Rwy 12-30 large cracks in rwy. Limited line-of-sight between Rwy 03 and 12, Rwy 03 and 30. Rwy 12-30 NSTD LIRL, spaced every 300'. For NSTD LIRL Rwy 12-30 ACTIVATE 3 clicks on 5 clicks off—CTAF.**COMMUNICATIONS:** CTAF 122.9Ⓡ **GREEN BAY APP CON** 119.4 (1130-0530Z‡)Ⓡ **GREEN BAY DEP CON** 126.55 (1130-0530Z‡)Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.55 (0530-1130Z‡)**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.**GREEN BAY (H) VORTACW** 115.5 GRB Chan 102 N44°33.31' W88°11.69' 349° 5.2 NM to fld. 767/1E.

HIWAS.

**QUAMS MARINA SPB** (See STOUGHTON)

**RACINE**

**JOHN H. BATTEN** (RAC) 2 NW UTC-6(-5DT) N42°45.67' W87°48.84'

674 B S2 FUEL 100LL, JET A LRA NOTAM FILE RAC  
**RWY 04-22:** H6574X100 (CONC-GRVD) S-50, D-65, ST-83 HIRL

**RWY 04:** MALS F. REIL. PAPI(P4L). Thld dsplcd 734'. Road.

**RWY 22:** REIL. PAPI(P4L)—GA 3.0° TCH 46'. Thld dsplcd 390'.  
 Railroad.

**RWY 14-32:** H4422X100 (ASPH) S-25, D-35 MIRL 0.4% up NW

**RWY 14:** REIL. PAPI(P4L). Thld dsplcd 806'. Road.

**RWY 32:** REIL. Tree.

**AIRPORT REMARKS:** Attended Mon-Fri 1300-2300Z, Sat-Sun 1400-2300Z. Migratory waterfowl on and invof arpt. PAEW AER 22. Rwy 22 REIL intermittent west side. ACTIVATE HIRL Rwy 04-22 and MIRL Rwy 14-32; PAPI Rws 04 and 14; REIL Rws 04; 22; 14 and 32; MALS Fwy 04—CTAF. PAPI Rwy 22 opr 24 hrs. Flight Notification Service (ADCUS) avbl.

**WEATHER DATA SOURCES:** ASOS 117.7 HRK (262) 635-0959.

**COMMUNICATIONS:** CTAF/UNICOM 123.075

Ⓜ MILWAUKEE APP/DEP CON 120.15 (South) CLNC DEL 120.15

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RAC.

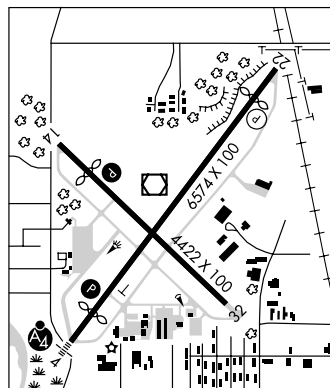
**HORLICK (T) VORW/DME** 117.7 HRK Chan 124 N42°45.73' W87°48.88' at fld. 669/2W. ASOS.

**PASER NDB (MHW/LOM)** 206 RA N42°40.95' W87°53.97' 041°  
 6.0 NM to fld. Unmonitored.

NDB unusable byd 10 NM.

**ILS** 108.7 I-RAC Rwy 04 LOM PASER NDB. Unmonitored 0500-1200Z.

GS unusable blo 819'.



**CHICAGO**  
 H-5E, L-28H, A  
 IAP

**RED WING MUNI** (See RED WING MUNI Minnesota)

**REEDSBURG MUNI** (C35) 1 E UTC-6(-5DT) N43°31.55' W89°58.99'

907 B S4 FUEL 100LL, JET A TPA-1907(1000) NOTAM FILE GRB

**RWY 18-36:** H4840X75 (ASPH) S-30 MIRL 0.5% up N

**RWY 18:** REIL. PAPI(P2L)—GA 3.0° TCH 25'. Thld dsplcd 440'. Road.

**RWY 36:** REIL. Thld dsplcd 300'. Railroad.

**RWY 07-25:** H2510X50 (ASPH) S-30 MIRL 0.6% up NE

**RWY 07:** Thld dsplcd 230'. Road.

**RWY 25:** Thld dsplcd 300'. Road.

**AIRPORT REMARKS:** Attended Jun-Aug 1400-0200Z, Sep-May 1400-2300Z. Deer on and invof arpt. 160' crane E of AER 07 flagged/Igtd. MIRL Rws 18-36 and 07-25 preset on low ints, to increase ints and ACTIVATE REIL Rws 18 and 36 and PAPI Rwy 18—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**DELLS RCO** 122.1R 117.0T (GREEN BAY RADIO)

Ⓜ MADISON APP/DEP CON 135.45 (1200-0500Z) GCO 121.725 (FLIGHT SERVICES)

Ⓜ CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLL.

**DELLS (H) VORTAC** 117.0 DLL Chan 117 N43°33.05' W89°45.82' 258° 9.7 NM to fld. 1020/3E.

**CHICAGO**  
 L-28G  
 IAP

**RHINELANDER—ONEIDA CO** (RHI) 2 SW UTC-6(-5DT) N45°37.85' W89°28.00'GREEN BAY  
H-2J, L-14J  
IAP1624 B S4 FUEL 100LL, JET A Class I, ARFF Index A NOTAM FILE RHI  
RWY 09-27: H6800X150 (CONC-GRVD) S-95, D-150, DT-235 HIRL 0.4% up W

RWY 09: MALSR. PAPI(P4L)—GA 3.0° TCH 53'.

RWY 27: REIL. VASI(V4L)—GA 3.0° TCH 49'. Trees.

RWY 15-33: H5201X100 (ASPH) S-55, D-95, DT-160 HIRL

RWY 15: REIL. VASI(V4L)—GA 3.75° TCH 50'. Tree.

RWY 33: REIL. PAPI(P4L)—GA 3.0° TCH 25'.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 09: TORA-6799 TODA-6799 ASDA-6799 LDA-6799

RWY 27: TORA-6799 TODA-6799 ASDA-6799 LDA-6799

**AIRPORT REMARKS:** Attended Oct-Apr 1400-2300Z†, May-Sep 1400-0100Z†. Birds and coyote on and invof arpt. PPR for unscheduled air carrier opns with more than 9 passenger seats ctc arpt manager 715-365-3416 or 715-365-3419. Rwy 15 VASI OTS indef. HIRL Rwy 09-27 preset on low ints; to increase ints and ACTIVATE HIRL Rwy 15-33, PAPI Rwy 09, VASI Rwy 27, Rwy 15, PAPI Rwy 33; REIL Rwy 15, Rwy 33, and Rwy 27 and MALSR Rwy 09—CTAF.

**WEATHER DATA SOURCES:** ASOS 126.825 (715) 362-7980. HIWAS 109.2 RHI.

**COMMUNICATIONS:** CTAF/UNICOM 123.0

RCO 122.1R 109.2T (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 133.65

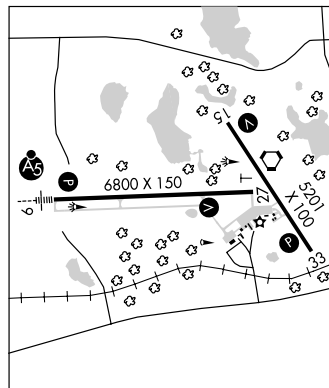
**AIRSPACE:** CLASS E svc Mon-Fri 1200-0400Z†, Sat 1200-0130Z†, Sun 1600-0400Z† other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

(L) VORTAC 109.2 RHI Chan 29 N45°38.03' W89°27.47' at fld. 1590/2E. HIWAS.

VOR portion unusable 310°-340° byd 20 NM blo 5000'. DME unusable byd 35 NM blo 3500'.

ARSHA NDB (LOM) 272 RH N45°37.69' W89°37.13' 087° 6.4 NM to fld.

ILS 111.3 I-RHI Rwy 09. Class IE. ILS unmonitored.

**RICE LAKE RGNL—CARL'S FLD** (RPD) 5 SW UTC-6(-5DT) N45°25.21' W91°46.40'GREEN BAY  
H-2J, L-14J  
IAP

1109 B S4 FUEL 100LL, JET A NOTAM FILE RPD

RWY 01-19: H6700X100 (ASPH) S-30, D-30 MIRL

RWY 01: MALSR. PAPI(P2L)—GA 3.0° TCH 38'. Thld dsplcd 200'. Rgt tfc.

RWY 19: REIL. PAPI(P2L)—GA 3.0° TCH 38'.

RWY 13-31: H3500X75 (ASPH) MIRL

RWY 13: REIL. PAPI(P2L)—GA 3.15° TCH 41'. Trees. RWY 31: REIL. PAPI(P2L)—GA 3.0° TCH 33'. Trees. Rgt tfc.

**AIRPORT REMARKS:** Attended 1200-0300Z†. Rwy 19 PAPI OTS indef. MIRL Rwy 01-19 preset on low ints dusk-dawn, to increase ints and ACTIVATE REIL Rwy 01 and Rwy 19, PAPI Rwy 01 and Rwy 19 and MALSR Rwy 01—CTAF.

**WEATHER DATA SOURCES** AWOS-3 120.525 (715) 458-4481.**COMMUNICATIONS:** CTAF/UNICOM 122.7

RCO 122.3 (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 125.3

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RPD.

(T) VORW/DME 110.0 RPD Chan 37 N45°24.91' W91°46.68' at fld. 1092/1E. OTS indef.

DME unusable 050°-080° byd 20 NM blo 2800'.

WICKR NDB (LOM) 221 RP N45°19.05' W91°48.17' 010° 6.3 NM to fld.

ILS 108.3 I-RPD Rwy 01. LOM WICKR NDB. ILS unmonitored indef.

**RICHARD I BONG** (See SUPERIOR)**RICHLAND** (See RICHLAND CENTER)

**RICHLAND CENTER****RICHLAND** (93C) 4 SE UTC-6(-5DT) N43°17.00' W90°17.90'**CHICAGO**

742 B FUEL 100LL NOTAM FILE GRB

L-28G

**RWY 17-35:** H3200X60 (ASPH) S-12.5 MIRL 0.6% up N.

IAP

**RWY 17:** REIL. PAPI(P2L)—GA 3.5° TCH 33'. Trees. **RWY 35:** REIL. PAPI(P2L)—GA 3.5° TCH 24'. Tree.**RWY 09-27:** 1500X100 (TURF) 0.7% up E.**RWY 09:** Road. **RWY 27:** Tree.**AIRPORT REMARKS:** Attended irregularly. Call 608-647-8804 for fuel. Ultralight activity on and invof arpt. Deer on and invof arpt. Rwy 09-27 not plowed; confirm winter and spring rwy conditions with arpt manager 608-647-8804. Rwy 09-27 marked with white and orange panels. ACTIVATE MIRL Rwy 17-35, PAPI and REIL Rws 17 and 35—CTAF.**COMMUNICATIONS:** CTAF 122.9® **CHICAGO CENTER APP/DEP CON** 133.3**RADIO AIDS TO NAVIGATION:** NOTAM FILE LNR.**LONE ROCK (L) VORW/DME** 112.8 LNR Chan 75 N43°17.66' W90°07.99' 265° 7.3 NM to fld. 1184/OE. HIWAS.**RIO****GILBERT FLD** (94C) 1 W UTC-6(-5DT) N43°27.00' W89°15.01'**CHICAGO**

925 TPA-1925(1000) NOTAM FILE GRB

**RWY 09-27:** 1092X65 (TURF)**RWY 09:** Trees. **RWY 27:** Trees.**AIRPORT REMARKS:** Unattended. Confirm winter rwy conditions and snow removal call 920-429-3513. E twy CLOSED indef. Rwy 09-27 thlds marked with orange cones.**COMMUNICATIONS:** CTAF 122.9**ROCHESTER****FOX RIVER** (96C) 2 NW UTC-6(-5DT) N42°45.00' W88°15.06'**CHICAGO**

822 NOTAM FILE GRB

**RWY 01-19:** H2500X36 (ASPH)**RWY 01:** Trees. **RWY 19:** Trees.**AIRPORT REMARKS:** Attended Mon-Fri 1200-2230Z†. Rwy 01-19 rwy asph is 10'-15' wider last 300' each end.**COMMUNICATIONS:** CTAF 122.9**ROCK RIVER** N43°10.42' W88°43.52' NOTAM FILE RYV.**CHICAGO****NDB (MHW)** 371 RYV at Watertown Muni. NDB unmonitored 0500-1000Z†.

L-28H

**RUSK CO** (See LADYSMITH)**SAUK-PRAIRIE** (See PRAIRIE DU SAC)**SAWYER CO** (See HAYWARD)**SEELEY** N46°06.73' W91°23.08' NOTAM FILE GRB.**GREEN BAY****NDB (MHW)** 344 SLY 205° 5.8 NM to Sawyer Co.

L-14I

NDB unusable byd 15 NM.

**SHAWANO MUNI** (EZS) 1 NE UTC-6(-5DT) N44°47.24' W88°33.60'

**GREEN BAY**

813 B S4 FUEL 100LL NOTAM FILE GRB

L-31A

RWY 11-29: H3900X75 (ASPH) S-17 MIRL

IAP

RWY 11: Road.

RWY 29: Trees.

RWY 17-35: H2225X60 (ASPH) MIRL

RWY 17: Road.

RWY 35: Trees.

**AIRPORT REMARKS:** Attended 1400Z±-dusk. Waterfowl and deer on and in/ovf arpt. ACTIVATE MIRL Rwy 11-29 and 17-35—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.65 (715) 526-2465.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ **GREEN BAY APP/DEP CON** 119.4 (1130-0530Z±)

Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 125.55 (0530-1130Z±)

GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.

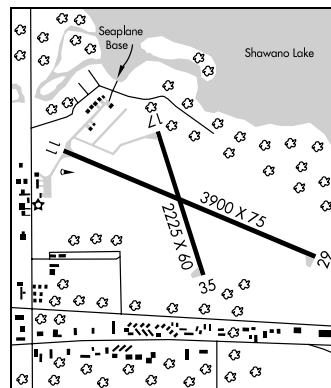
**GREEN BAY (H) VORTACW** 115.5 GRB Chan 102 N44°33.31'

W88°11.69' 311° 20.9 NM to fld. 767/1E. **HIWAS.**

• • • • •

**WATERWAY ALL WAY:** 12,000X1000 (WATER)

**SEAPLANE REMARKS:** Seaplane waterway CLOSED early Nov to early May, call arpt manager 715-526-2465 for conditions. Rotating bcn located on arpt ½ mile SW of seaplane. Seaplane base has floating tie downs and beaching ramp.



**SHEBOYGAN CO MEML** (SBM) 3 NW UTC-6(-5DT) N43°46.15' W87°51.13'

**CHICAGO**

754 B S4 FUEL 100LL, JET A TPA-1554(800) NOTAM FILE SBM

H-21, L-28H

RWY 03-21: H6000X100 (CONC-GRVD) S-60, D-60 HIRL

IAP

RWY 03: REIL. PAPI(P4R)—GA 3.0° TCH 52'. Trees.

RWY 21: MALSR. PAPI(P4L)—GA 3.0° TCH 43'.

RWY 13-31: H5000X75 (ASPH) S-23, D-32 MIRL 0.3% up NW

RWY 13: PAPI(P4L)—GA 3.0° TCH 40'. Trees.

RWY 31: PAPI(P4L)—GA 3.0° TCH 40'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1200Z±-dusk, Sat-Sun dawn-dusk. Ultralight activity on and in/ovf arpt. Waterfowl and deer on and in/ovf arpt. Twy A clsd indef. Rwy 03 REIL OTS indef. Rwy 21 MALSR OTS indef. Rwy 13 PAPI OTS indef. For services call 920-467-6151-frequency 129.85 or 920-467-0370-frequency 131.35. HIRL Rwy 03-21 and MIRL Rwy 13-31 preset low ints, to increase ints and ACTIVATE PAPI Rwy 21; REIL Rwy 03 and MALSR Rwy 21—CTAF.

**WEATHER DATA SOURCES:** ASOS 110.0 FAH (920) 467-0744.

**COMMUNICATIONS:** CTAF/UNICOM 122.7

FALLS RCO 122.1R 110.0T (GREEN BAY RADIO)

Ⓡ **MILWAUKEE APP/DEP CON** 127.0 **CLNC DEL** 127.375

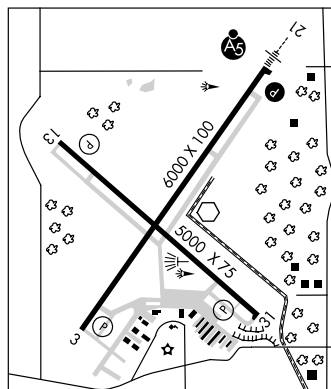
GCO 121.725 (FLIGHT SERVICES)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE OSH.

**OSHKOSH (L) VORTAC** 111.8 OSH Chan 55 N43°59.43' W88°33.36' 111° 33.3 NM to fld. 780/2E.

**FALLS (L) VOR/DME** 110.0 FAH Chan 37 N43°46.13' W87°50.93' at fld. 740/2W. NOTAM FILE SBM. **ASOS.**

**ILS/DME** 110.7 I-HEV Chan 44 Rwy 21.



**SHELL LAKE MUNI** (SSQ) 1 SE UTC-6(-5DT) N45°43.88' W91°55.24'

GREEN BAY

1233 B NOTAM FILE GRB

L-141

RWY 14-32: H3711X50 (ASPH) MIRL

IAP

RWY 14: PAPI(P2L)-GA 4.0° TCH 21'. Thld dsplcd 619'. Trees.

RWY 32: REIL: PAPI(P2L)-GA 3.0° TCH 21'. Thld dsplcd 211'. Boat.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 14: TORA-3711 TODA-3711 ASDA-3500 LDA-2881

RWY 32: TORA-3286 TODA-3711 ASDA-3711 LDA-3500

**AIRPORT REMARKS:** Unattended. Birds on and invof arpt. ACTIVATE MIRL

Rwy 14-32; PAPI Rwy 14 and Rwy 32; REIL Rwy 32—CTAF.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

RICE LAKE RCO 122.3 (FLIGHT SERVICES)

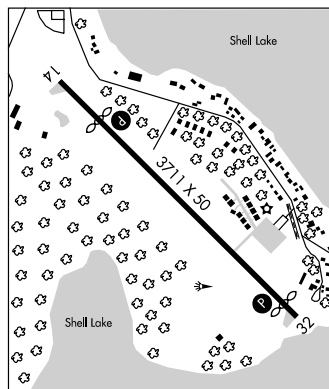
Ⓡ MINNEAPOLIS CENTER APP/DEP CON 126.45

GCO 121.725 (GREEN BAY FSS)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RPD.

RICE LAKE (T) VORW/DME 110.0 RPD Chan 37 N45°24.91'

W91°46.68' 341° 19.9 NM to fld. 1092/1E. OTS indef.



**SHIOCTON** (W34) 1 NE UTC-6(-5DT) N44°27.28' W88°33.71'

GREEN BAY

769 NOTAM FILE GRB

RWY 18-36: 2340X110 (TURF)

RWY 18: REIL(NSTD). Trees.

RWY 36: REIL(NSTD). Antenna.

RWY 09-27: 1415X110 (TURF)

RWY 09: Tree.

RWY 27: Road.

**AIRPORT REMARKS:** Unattended. Arpt CLOSED 15 Mar-25 Apr. Parachute Jumping. Ultralight activity on and invof arpt.

Deer activity on and invof arpt. Rwy 09-27 marked by orange and white barrels. Rwy 18-36 marked with orange

and white barrels. Rwy 18-36 NSTD REIL; solar powered. Rwy 18-36 cones marking drain ditch W of rwy where

Rwy 09-27 crosses.

**COMMUNICATIONS:** CTAF 122.9

**SIREN** N45°49.23' W92°22.47' NOTAM FILE RZN.

GREEN BAY

(L) VOR/DME 109.4 RZN Chan 31 at Burnett Co. 987/2E. HIWAS.

L-141

VOR/DME unusable 030°-170° byd 20NM blo 3400'. VOR unusable 011°-029° byd 20NM 275°-330°.

DME unusable

171°-180° byd 35 NM blo 3400'.

260°-350° byd 30 NM blo 3300'.

180°-200° byd 30 NM blo 3500'.

350°-029° byd 35 NM blo 3000'.

200°-260° byd 25 NM blo 3800'.

RCO 122.1 R 109.4T (GREEN BAY RADIO)



**SIREN****BURNETT CO** (RZN) 3 N UTC-6(-5DT) N45°49.36' W92°22.35'

989 B FUEL 100LL, JET A, MOGAS NOTAM FILE RZN

RWY 04-22: H3900X75 (ASPH) S-8 MIRL

RWY 04: REIL. PAPI(P2L)—GA 3.45 TCH 27'. Trees.

RWY 22: REIL. PAPI(P2L)—GA 3.0 TCH 28'. Road.

RWY 13-31: H3500X75 (ASPH) S-8 MIRL

RWY 13: REIL. PAPI(P2L)—GA 3.0 TCH 28'. Trees.

RWY 31: REIL. PAPI(P2L)—GA 3.45 TCH 27'. Trees.

**AIRPORT REMARKS:** Attended Mon-Fri 1400-2230Z†, Sat-Sun 1500-2200Z†. Fuel 24 hr self svc. Occasional deer and bear on rwy. Rwy 13 and Rwy 31 REIL OTS indef. ACTIVATE MIRL Rwys 04-22 and 13-31; REIL Rwys 04-22 and 13-31—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.325 (715) 349-8563. HIWAS 109.4 RZN.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

SIREN RCO 122.1R 109.4T (GREEN BAY RADIO)

① MINNEAPOLIS CENTER APP/DEP CON 121.05

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RZN.

SIREN (L) VOR/DME 109.4 RZN Chan 31 N45°49.23'

W92°22.47' at fld. 987/2E. HIWAS.

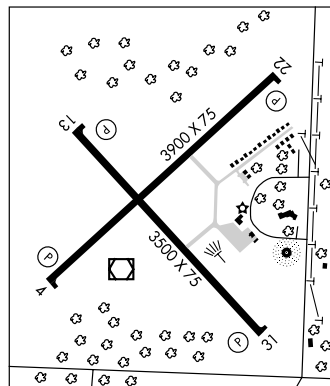
**BIG DOCTOR NDB (MHW) 203 BXR** N45°49.28' W92°21.99' at fld.

NOTAM FILE GRB. VFR only.

GREEN BAY

L-141

IAP

**OLON SPRINGS****NORTH COUNTRY SPB** (SS1) 1 E UTC-6(-5DT) N46°22.19' W91°47.88'

1000 NOTAM FILE GRB

WATERWAY 04-22: 6000X500 (WATER)

WATERWAY 09-27: 3500X500 (WATER)

**SEAPLANE REMARKS:** Unattended.**COMMUNICATIONS:** CTAF 122.9

GREEN BAY

L-141

IAP

**OLON SPRINGS MUNI** (OLG) 3 S UTC-6(-5DT) N46°18.89' W91°48.98'

1102 B S2 FUEL 100LL TPA-2102(1000) NOTAM FILE GRB

RWY 01-19: H3100X60 (ASPH) S-27 LIRL

RWY 01: Trees. RWY 19: Trees.

**AIRPORT REMARKS:** Unattended. Numerous deer on arpt. Acft mechanic on call 715-399-2171. LIRL Rwy 01-19 preset low ints dusk-dawn, ACTIVATE higher ints—CTAF. Twy to ramp from rwy marked by reflectors.

**COMMUNICATIONS:** CTAF 122.9

① DULUTH APP/DEP CON 125.45 (1200-0500Z†)

① MINNEAPOLIS CENTER APP/DEP CON 127.9 (0500-1200Z†)

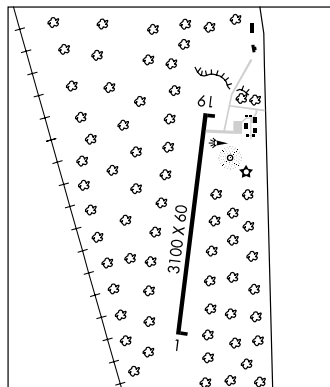
**RADIO AIDS TO NAVIGATION:** NOTAM FILE DLH.

DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13'

W92°12.17' 146° 33.3 NM to fld. 1428/5E. HIWAS.

**NDB (MHW) 388 OLG** N46°19.02' W91°48.84' at fld. NOTAM

FILE GRB. Unmonitored. SHUTDOWN.

**SOUTHERN WISCONSIN RGNL** (See JANESVILLE)

**SPARTA****SPARTA/FORT McCOY** (CMY)(KCMY) CIV/MIL 3 NE UTC-6(-5DT) N43°57.50' W90°44.27'**CHICAGO**837 B **FUEL** 100LL NOTAM FILE CMY**L-286****RWY 11-29:** H4708X100 (ASPH) MIRL**IAP****RWY 11:** REIL. Trees. **RWY 29:** REIL. PVASI(PSIR)—GA 3.0° TCH 65'. Thld dspld 425'. Road.**RWY 01-19:** H4295X50 (ASPH) PCN 13 F/B/W/T MIRL 0.3% up S**RWY 01:** Thld dspld 1375'. Road. **RWY 19:** Trees.**MILITARY SERVICE: FUEL** J8 (MIL) (NC-100LL PPR) PPR C608-388-3721/3713, DSN 280-3721/3713.**AIRPORT REMARKS:** Attended 1330-2200Z±. Except national training holiday. PPR for fuel; call 608-269-3122.

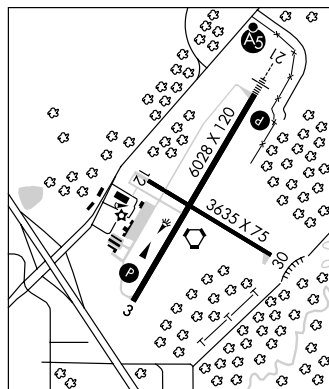
Occasional wild game and birds on and in/ovf arpt. ACTIVATE MIRL Rwy 01-19 and Rwy 11-29—CTAF. REIL Rwy 11 and Rwy 29 opr only when rwy lgts set on high ints.

**MILITARY REMARKS: CAUTION** Intermittent heavy C-130/high performance opr. Use advisory svc if avbl.**WEATHER DATA SOURCES:** AWOS-3 118.375 (608) 269-0724.**COMMUNICATIONS: CTAF** 124.6Ⓡ **VOLK APP/DEP CON** 135.25 290.8 (Mon-Fri 1400-2200Z± except holidays), other times etc,Ⓡ **CHICAGO CENTER APP/DEP CON** 133.3 380.35**McCOY TOWER** 38.5 124.6 241.0 (Mon-Fri 1400-2200Z± exc Federal holidays) **RANGE** 43.15 46.8 124.6 247.4**GCO** 121.725 (FLIGHT SERVICES)**AIRSPACE: CLASS D** Mon-Fri 1400-2200Z± exc Federal holidays, other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE LSE.**LA CROSSE (T) VORW/DME** 108.4 LSE Chan 21 N43°52.57' W91°15.36' 075° 23 NM to fld. 650/2E.**McCOY NDB (MHW)** 412 CMY N43°56.27' W90°38.51' 287° 4.3 NM to fld. NOTAM FILE CMY.**SPOONER****NEST OF EAGLES** (1H9) 3E UTC-6(-5DT) N45°50.13' W91°48.16'**GREEN BAY**

1120 B NOTAM FILE GRB Not insp.

**RWY 01-19:** 3600X100 (TURF)**RWY 01:** Trees. **RWY 19:** Trees.**AIRPORT REMARKS:** Unattended. Snow not plowed winter months, turf cut and maintained summer months.**COMMUNICATIONS: CTAF** 122.9**STEVENS POINT MUNI** (STE) 3 NE UTC-6(-5DT) N44°32.71' W89°31.82'**GREEN BAY**1110 B S4 **FUEL** 100LL, JET A TPA-2110(1000) NOTAM FILE STE**H-21, L-141****RWY 03-21:** H6028X120 (ASPH) S-30, D-75, DT-195 HIRL**IAP****RWY 03:** REIL. PAPI(P2L)—GA 3.0° TCH 38'. Trees.**RWY 21:** MALSR. PAPI(P2L)—GA 3.0° TCH 37'. Tree.**RWY 12-30:** H3635X75 (ASPH) S-9 D-75 HIRL**RWY 12:** Road. **RWY 30:** Trees.**AIRPORT REMARKS:** Attended dalgt hrs. Fuel 24 hr self svc. Deer and migratory waterfowl on and in/ovf arpt. ACTIVATE HIRL Rwy 03-21 and Rwy 12-30 and MALSR Rwy 21 and REIL Rwy 03 and PAPI Rwys 03 and 21—CTAF.**WEATHER DATA SOURCES:** AWOS-3 119.275 (715) 344-5960.**HIWAS** 110.6 STE.**COMMUNICATIONS: CTAF/UNICOM** 122.7**RCO** 122.1R 110.6T (GREEN BAY RADIO)Ⓡ **MINNEAPOLIS CENTER APP/DEP CON** 124.4**RADIO AIDS TO NAVIGATION:** NOTAM FILE STE.**(L) VORTAC** 110.6 STE Chan 43 N44°32.60'W89°31.83' at fld. 1110/2E. **HIWAS.**

DME unusable byd 35 NM blo 3000'.

**ILS/DME** 111.35 I-STE Chan 50Y Rwy 21.

**STOUGHTON****QUAMS MARINA SPB** (99C) 3 NW UTC-6(-5DT) N42°57.07' W89°16.26'**CHICAGO**

843 FUEL MOGAS TPA-1843(1000) NOTAM FILE GRB

WATERWAY ALL WAY: 15000X4000 (WATER)

SEAPLANE REMARKS: Attended Apr-Oct Mon-Fri 1400-0000Z†, Sat 1500-2300Z†, Sun 1500-2200Z†, Nov-Mar irregularly.

COMMUNICATIONS: CTAF 122.9

**STURGEON BAY** N44°50.21' W87°25.35' NOTAM FILE SUE.**GREEN BAY**

NDB (MHW) 414 SUE at Door Co Cherryland.

L-31B

**STURGEON BAY****DOOR CO CHERRYLAND** (SUE) 2 W UTC-6(-5DT) N44°50.62' W87°25.29'**GREEN BAY**

725 B S4 FUEL 100LL, JET A NOTAM FILE SUE

L-31B

RWY 02-20: H4600X75 (ASPH) S-16, D-22 MIRL 0.4% up S

IAP

RWY 02: LDIN. REIL. PAPI(P4L)—GA 3.0° TCH 32'. Road.

RWY 20: REIL. PAPI(P4L)—GA 3.0° TCH 46'. Trees.

RWY 10-28: H3199X75 (ASPH) S-16, D-22 MIRL

RWY 10: REIL. PAPI(P4L)—GA 3.0° TCH 31'. Road.

RWY 28: REIL. PAPI(P4L)—GA 3.0° TCH 37'. Trees.

AIRPORT REMARKS: Attended Mon-Sat 1300-2200Z†, Sun 1600-2200Z†. Except summer hrs from Labor Day—Memorial Day Fri and Sat 1300-0000Z†, Sun 1500-2200Z†. After hrs fueling avbl, ctc 920-743-6952. Be Alert: No line of sight Rwy 02 to Rwy 20. Deer, turkeys and seagulls occasionally on arpt. Ultralight activity on and invof arpt. Group of five twrs approximately 4 NM northeast, tallest twr is 1300' MSL/489' AGL. ACTIVATE MIRL Rwy 02-20 and 10-28; PAPI Rwy 02, 20, 10 and 28; REIL Rwy 02; 20; 10 and 28; LDIN Rwy 02—CTAF.

WEATHER DATA SOURCES: AWOS-3 128.325 (920) 743-7087

COMMUNICATIONS: CTAF/UNICOM 122.7

① GREEN BAY APP/DEP CON 119.25 (1130-0530Z†)

① MINNEAPOLIS CENTER APP/DEP CON 125.55 (0530-1130Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE GRB.

GREEN BAY (H) VORTACW 115.5 GRB Chan 102 N44°33.31' W88°11.69' 061° 37.3 NM to fld. 767/1E. HIWAS.

FICHY NDB (LOM) 224 II N44°45.36' W87°26.95' 016° 5.4 NM to fld. Unmonitored.

STURGEON BAY NDB (MHW) 414 SUE N44°50.21' W87°25.35' at fld. NOTAM FILE SUE.

SDF 111.9 III Rwy 02. LOM FICHY NDB. SDF unusable byd 12° left or right of course. Unmonitored.

**STURTEVANT****SYLVANIA** (C89) 3 W UTC-6(-5DT) N42°42.20' W87°57.54'**CHICAGO**

785 B S4 FUEL 100LL TPA-1585(800) NOTAM FILE GRB

RWY 08L-26R: 2343X120 (TURF) MIRL

RWY 08L: Road. RWY 26R: Road.

RWY 08R-26L: H2272X38 (ASPH) MIRL (NSTD)

RWY 08R: Road. RWY 26L: PAPI(P2L). Thld dspcd 140'. Road.

AIRPORT REMARKS: Attended dalgt hrs. Parachute activity on and invof arpt. Ultralight activity on arpt. ACTIVATE MIRL

Rwy 08R-26L and PAPI Rwy 26L—CTAF.

COMMUNICATIONS: CTAF/UNICOM 122.8

**SUPERIOR****RICHARD I BONG** (SUW) 3 S UTC-6(-5DT) N46°41.38' W92°05.68'**GREEN BAY**

674 B S4 FUEL 100LL, JET A NOTAM FILE SUW

H-21, L-141

RWY 03-21: H5100X75 (ASPH) MIRL

IAP

RWY 03: REIL. PAPI(P4L)—GA 3.0° TCH 28'. Pole.

RWY 21: REIL. Trees.

RWY 13-31: H4000X75 (ASPH) MIRL

RWY 13: REIL. Trees.

RWY 31: REIL. PAPI(P4L)—GA 4.0°. Road.

AIRPORT REMARKS: Attended 1400Z†-dusk. Parachute Jumping. Deer on and invof arpt. ACTIVATE MIRL Rwy 13-31 and 03-21 and REIL Rwy 13-31 and 03-21—CTAF.

WEATHER DATA SOURCES: AWOS-3 118.875 (715) 394-0283.

COMMUNICATIONS: CTAF/UNICOM 122.7

① DULUTH APP/DEP CON 125.45 (1200-0500Z†) CLNC DEL 124.8

① MINNEAPOLIS CENTER APP/DEP CON 127.9 (0500-1200Z†)

RADIO AIDS TO NAVIGATION: NOTAM FILE DLH.

DULUTH (H) VORTACW 112.6 DLH Chan 73 N46°48.13' W92°12.17' 141° 8.1 NM to fld. 1428/5E. HIWAS.

BONG NDB (MHW) 260 SUW N46°41.48' W92°06.21' at fld. NOTAM FILE SUW.

**SURING****PISO** (7P5) 4.3 NW UTC-6(-5DT) N45°03.92' W88°25.59'

GREEN BAY

891 **FUEL** MOGAS TPA-1391(500) NOTAM FILE GRB**RWY 01-19:** 2080X55 (TURF)**RWY 01:** Trees. **RWY 19:** Trees.**AIRPORT REMARKS:** Unattended. Fuel avbl and local full svc gas station N end of field during dalgt hrs. Rwy not plowed and arpt CLOSED Nov 15 thru Mar 31. Rwy 18-36 south half of rwy severely rutted. Rwy 01-19 marked with orange barrels.**COMMUNICATIONS:** CTAF 122.9**SWEETWATER BAY SPB** (See OCONTO)**SYLVANIA** (See STURTEVANT)**TAYLOR CO** (See MEDFORD)**TEELS** N42°54.54' W88°02.46' NOTAM FILE MKE.

CHICAGO

**NDB (MH/LOM)** 242 GM 072° 6.8 NM to General Mitchell Intl. Unmonitored.

L-28H, A

**THREE CASTLES AIRPARK** (See WONEWOC)**THREE LAKES****THREE LAKES MUNI** (4ØD) 3 SE UTC-6(-5DT) N45°47.41' W89°07.26'

GREEN BAY

1636 B TPA-2436(800) NOTAM FILE GRB

**RWY 03-21:** 3400X120 (TURF) LIRL(NSTD)**RWY 03:** Trees. **RWY 21:** PAPI(P2L)-GA 3.0° TCH 24'.**AIRPORT REMARKS:** Unattended. Rwy 03-21 not plowed Nov-May. 1683' AGL, 3327' MSL twr 8.5 NM SW. Rwy 03-21 ends marked with yellow cones.**COMMUNICATIONS:** CTAF/UNICOM 122.7**TIMMERMAN** N43°06.59' W88°02.24'. NOTAM FILE MWC.

CHICAGO

(L) **VOR/DME** 112.5 **LJT** Chan 72 at Lawrence J. Timmerman. 737/2W.

A

VOR unusable byd 25 NM 030°-230° blo 5500', 230°-310 blo 6500', 310°-030° blo 4500'.

DME unusable 120°-200° byd 25 NM blo 3500', 200°-315° byd 20 NM blo 5000', 315°-120° byd 25 NM blo 4000'.

**RCO** 123.6R 112.5T (GREEN BAY RADIO)**TOMAH****BOLEY FLD** (Y72) 1 E UTC-6(-5DT) N43°58.57' W90°28.84'

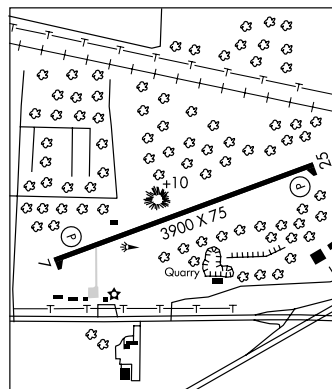
CHICAGO

966 B **FUEL** 100LL NOTAM FILE GRB

L-28G

**RWY 07-25:** H3900X75 (ASPH) MIRL**RWY 07:** REIL. PAPI(P2L)-GA 3.0° TCH 33'. Tree.**RWY 25:** REIL. PAPI(P2L)-GA 3.0° TCH 35'. Trees.**AIRPORT REMARKS:** Unattended. Rwy 07-25 E 300' has 1 inch dips. For fuel call 608-372-3125. MIRL Rwy 07-25 preset on low ints; to increase ints and **ACTIVATE REIL** Rwy 07 and Rwy 25-CTAF.**COMMUNICATIONS:** CTAF 122.9**RADIO AIDS TO NAVIGATION:** NOTAM FILE PNM.**NODINE (H) VORTAC** 117.9 ODI Chan 126 N43°54.74'

W91°28.05' 084° 43.0 NM to fld. 1282/1E.



**TOMAHAWK RGNL** (TKV) 3 W UTC-6(-5DT) N45°28.16' W89°48.34'

**GREEN BAY**

1487 B S4 FUEL 100LL, JET A NOTAM FILE TKV

L-14J

RWY 09-27: H3998X75 (ASPH) S-26 MRL 0.5% up E

IAP

RWY 09: REIL. PAPI(P2L)—GA 3.0° TCH 25'. Road.

RWY 27: REIL. PAPI(P2L)—GA 3.0° TCH 21'. Trees.

**AIRPORT REMARKS:** Attended continuously. Airframe and powerplant repairs by prior arrangement call 715-453-2264 or 453-3482. Deer on and invof arpt. ACTIVATE MRL Rwy 09-27, PAPI and REIL Rwy 09 and Rwy 27—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.25 (715) 453-5716.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

**MINNEAPOLIS CENTER APP/DEP CON** 133.65

**RADIO AIDS TO NAVIGATION:** NOTAM FILE RHI.

**RHINELANDER (L) VORTAC** 109.2 RHI Chan 29 N45°38.03' W89°27.47' 234° 17.7 NM to fld. 1590/2E.

HIWAS.

**TRI-COUNTY RGNL** (See LONE ROCK)

**VERONA** (W19) 1 E UTC-6(-5DT) N42°59.00' W89°31.01'

**CHICAGO**

960 TPA-1560(600) NOTAM FILE GRB

RWY 03-21: 2190X90 (TURF)

RWY 03: Trees.

RWY 21: Trees.

RWY 04-22: 1950X85 (TURF)

RWY 04: Road. Rgt tfc.

RWY 22: Trees.

**AIRPORT REMARKS:** Unattended. Arpt surfaces not plowed for snow. Confirm surface conditions with arpt manager 608-845-7239. Deer on and invof arpt. Ultralight activity on and invof arpt. Balloon ops normally early AM and PM—daigt hrs. Rwy 03-21 900' from S end rough. Rwy 04-22 marked with reflectors no markings on S end of rwy. Rwy 04-22 4-6' fence and berm 20' S of rwy edge parallels rwy. Avoid overflights of institution 0.5N and Village Park 1.0W of arpt.

**COMMUNICATIONS:** CTAF 122.9

**VINCENT** (See GENOA CITY)

**VIROQUA MUNI** (Y51) 2 N UTC-6(-5DT) N43°34.76' W90°53.79'

**CHICAGO**

1292 B FUEL 100 NOTAM FILE GRB

L-28G

RWY 11-29: H3346X60 (ASPH) S-12 HIRL 0.7% up SE

IAP

RWY 29: Trees.

RWY 02-20: 2555X90 (TURF) 1.0% up SW

RWY 20: Trees.

**AIRPORT REMARKS:** Unattended. 24 hr fuel avbl. Rwy 02-20 CLOSED Nov 15 thru Apr 15. Rwy 02-20 has sharp 20' drop-off each end. Rwy slopes downhill to the N approximately 1.5%. Rwy 02-20 marked with yellow cones. Rwy 11-29 HIRLS on low ints—increase ints on CTAF.

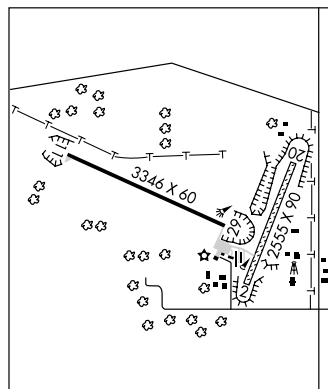
**COMMUNICATIONS:** CTAF 122.9

**MINNEAPOLIS CENTER APP/DEP CON** 128.6

**RADIO AIDS TO NAVIGATION:** NOTAM FILE LSE.

**LA CROSSE (T) VORW/DME** 108.4 LSE Chan 21 N43°52.57'

W91°15.36' 137° 23.7 NM to fld. 650/2E.



**VOLK FLD** (VOK) (KVOK) ANG 1N UTC-6(-5DT) N43°56.34' W90°15.21' **CHICAGO**  
 912 B TPA—See Remarks NOTAM FILE GRB Not insp. H-2J, L-286  
**RWY 09-27:** H9000X150 (ASPH-CONC-GRVD) PCN 97 R/B/W/T HIRL DIAP, AD  
**RWY 09:** MALSR. PAPI(P4L). **RWY 27:** ALSF1. PAPI(P4R). Rgt tfc.  
**ARRESTING GEAR/SYSTEM**  
**RWY 09** HOOK BAK-12B(B) (1260') HOOK BAK-12B(B) (1250') **RWY 27**  
**MILITARY SERVICE:** LGT ACTIVATE-ALS, HIRL, PAPI Rwy 09-27-CTAF or 239.25. Rwy 27 PAPI NSTD located rgt side.  
**A-GEAR** Normal BAK-12B(B) configuration: apch end down, dep end up; 20 min prior notice to reconnect apch end cable. **JASU** (AM32A-60A) 6(A/M32A-86) **FUEL** J8 Avbl limited, expect possible gnd delay for req exceeding 10,000 gal. **FLUID** LPOX LOX **TRAN ALERT** Extremely limited.  
**MILITARY REMARKS:** Opr Mon-Fri 1400-2200Z+ except holidays, subject short notice change in support of NGB validated flying. Check NOTAM for current afld hrs. See FLIP AP/1 Supplementary Arpt Remarks.  
**RSTD** Recommend use as emergency arpt only when rqr to land as soon as possible. PPR ctc Volk Fld DSN 871-1205, C608-427-1205. Issued PPR valid for ETA +/- 1 hr. Early/late arr/dep must be coordinated. After hr re-coordination or cancel will be passed to Base OPS standby personnel C608-343-0104. Twy G ltd to F-16 acft or smaller and helicopter traffic. **CAUTION** FMQ-19 automated wx obsn avbl 24 hr, DSN 871-1066, C 608-427-1066. When wind is from S/SW expect possible Low Level Wind Shear 1 to 3 NM on final to Rwy 27. Due to tactical acft rqr, BAK-12 cable may be in position for Rwy 09-27 simultaneously. Twy E and F unlgtd, unlimited daytime VFR use, Follow Me rqr for day IFR and night IFR/VFR use. **TFC PAT** Left tfc Rwy 09. TPA-Helicopter rectangular 1500(588). **MISC** First 1600' Rwy 09 and first 1600' Rwy 27 grooved concrete, mid 5800' grooved asphalt. Standard USAF RSRS applied.  
**COMMUNICATIONS:** SFA CTAF 127.5 ATIS 120.475 257.85 PTD 372.2  
 (R) **APP/DEP CON** 135.25 290.8 (Mon-Fri 1400-1600Z+, except holidays, subject short notice change in support of NGB validated flying, check NOTAMS for current afld hrs), other time ctc  
 (R) **CHICAGO CENTER APP/DEP CON** 133.3 257.92  
**TOWER** 127.5 239.25 (Mon-Fri 1400-1600Z+, except holidays, subject short notice change in support of NGB validated flying, check NOTAMS for current afld hrs.) **GND CON** 121.9 275.8  
**SHEBOYGAN RANGE** 260.4  
**HARDWOOD RANGE** 132.025 297.775 358.8  
**AIRSPACE:** CLASS D svc Mon-Fri 1400-0600Z+ except holidays subject short notice change in support of NGB validated flying, other times CLASS G.  
**RADIO AIDS TO NAVIGATION:** NOTAM FILE GRB.  
 (L) **TACAN** Chan 41 VOK (110.4) N43°56.57' W90°15.54' at fld. 961/OE. Unmonitored when twr clsd. No NOTAM MP Mon 1400-1530Z+.  
 TACAN unusable byd 20NM blo 4,000'.  
**ILS** 108.5 I-VOK Rwy 27. Class IE. Unmonitored when twr clsd. Back course unusable. No NOTAM MP: Localizer Mon 1930-2030Z+; Glide slope Mon 2030-2130Z+.  
**COMM/NAV/WEATHER REMARKS:** Limited Special Rules Area svc avbl, ctc Radar Approach Control at DSN 871-1779, C608-427-1779.

## WALWORTH

**BIG FOOT AIRFIELD** (7V3) 3 W UTC-6(-5DT) N42°31.54' W88°39.18' **CHICAGO**  
 951 TPA-1751(800) NOTAM FILE GRB  
**RWY 09-27:** 2912X85 (TURF)  
**RWY 09:** Tree.  
**RWY 18-36:** 2108X100 (TURF) LIRL (NSTD)  
**RWY 18:** Tree.  
**AIRPORT REMARKS:** Unattended. Rws not plowed winter months—open to ski equipped acft only. Rwy 18-36 NSTD LIRL; Rwy 18 thld lghts are 45' S of rwy markers. Rwy 18-36 and Rwy 09-27 thlds marked with red half barrels. ACTIVATE NSTD LIRL Rwy 18-36-123.75.  
**COMMUNICATIONS:** CTAF 122.9

**WASHINGTON ISLAND** (2P2) 1 S UTC-6(-5DT) N45°23.17' W86°55.47' **GREEN BAY**  
 652 B TPA-1652(1000) NOTAM FILE GRB  
**RWY 14-32:** 2230X150 (TURF) LIRL  
**RWY 14:** Road. **RWY 32:** Trees.  
**RWY 04-22:** 1300X125 (TURF)  
**RWY 04:** Trees. **RWY 22:** Trees.  
**AIRPORT REMARKS:** Unattended. Rwy 14-32 +12' rise in rwy elevation NW 900'. Numerous flocks of waterfowl and deer on and invof arpt. Rws 14-32 and 04-22 plowed when snow is over 3 inches. Rwy 04-22 slopes downhill to the NE. Rwy 04 thld +20' higher than Rwy 22 thld. ACTIVATE LIRL Rwy 14-32 and rotating bcn-CTAF.  
**COMMUNICATIONS:** CTAF 122.9

**WATERTOWN MUNI** (RYV) 0 S UTC-6(-5DT) N43°10.18' W88°43.39'

CHICAGO

833 B S4 FUEL 100LL, JET A OX 2 NOTAM FILE RYV

L-28H

RWY 05-23: H4429X75 (ASPH) S-30, D-60 MIRL

IAP

RWY 05: REIL. PAPI(P2L)—GA 3.0° TCH 50'. Thld dsplcd 190'. Tree. Rgt tfc.

RWY 23: REIL. PAPI(P2L)—GA 3.0° TCH 45'. Tree.

RWY 11-29: H2801X75 (ASPH) S-30 MIRL 0.4% up SE

RWY 11: Road. Rgt tfc.

RWY 29: Road.

**RUNWAY DECLARED DISTANCE INFORMATION**

RWY 05: TORA-4430 TODA-5110 ASDA-4550 LDA-4430

RWY 23: TORA-4430 TODA-4845 ASDA-4430 LDA-4430

**AIRPORT REMARKS:** Attended 1200-0400Z. Arpt attended other hrs on req thru FBO. Ducks and seagulls occasionally near arpt during seasonal migrations. Deer on and in/ov arpt. ACTIVATE MIRL Rwy 05-23 and Rwy 11-29, PAPI Rwy 05 and Rwy 23 and REIL Rwy 05 and Rwy 23—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 119.975 (920) 261-0734.**COMMUNICATIONS:** CTAF/UNICOM 122.8

® MADISON APP/DEP CON 119.15 (1200-0500Z)

® CHICAGO CENTER APP/DEP CON 133.3 (0500-1200Z)

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.

**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 277° 19.5 NM to fld. 1080/2E.  
HIWAS.

**ROCK RIVER NDB (MHW)** 371 RYV N43°10.42' W88°43.52' at fld. NOTAM FILE RYV.

NDB unmonitored 0500-1000Z.

**WAUKESHA CO** (UES) 2 N UTC-6(-5DT) N43°02.46' W88°14.22'

CHICAGO

911 B S4 FUEL 100LL, JET A OX 1 NOTAM FILE UES

H-5E, L-28H, A

RWY 10-28: H5848X100 (CONC-GRVD) S-40, D-66, ST-84 HIRL

IAP, AD

RWY 10: MALSR. VASI(V4L)—GA 3.0° TCH 56'. Trees.

RWY 28: REIL. VASI(V4L)—GA 3.75° TCH 37'. Tree.

RWY 18-36: H3598X75 (ASPH) S-20 MIRL

RWY 18: REIL. PAPI (P2L). Road.

RWY 36: REIL. PAPI (P2L). Road.

**AIRPORT REMARKS:** Attended continuously. Deer and coyotes on and in/ov arpt. Call 262-549-6150 for oxygen availability. Twy D clsd at Rwy 18-36 indef. HIRL Rwy 10-28 preset on low ints; to increase ints and ACTIVATE MIRL Rwy 18-36; REIL Rwy 28, Rwy 18, Rwy 36, and MALSR Rwy 10—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 118.875 (262) 521-5226.

Unavailable 1200-0300Z.

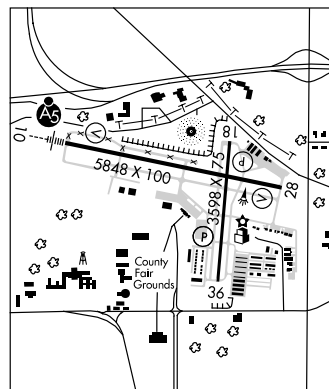
**COMMUNICATIONS:** CTAF 123.7 ATIS 118.875 UNICOM 122.95

® MILWAUKEE APP/DEP CON 128.7 (North) CLNC DEL 128.7

(0300-1200Z)

**TOWER** 123.7 (1200-0300Z) **GND CON** 121.6**AIRSPACE:** CLASS D svc 1200-0300Z other times CLASS G.**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.

**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 153° 5 NM to fld. 1080/2E. HIWAS.

**NDB (MHW)** 359 UES N43°02.68' W88°14.11' at fld. NOTAM FILE UES. OTS indef.**ILS** 109.5 I-SKC Rwy 10. Unmonitored when twr clsd.**WAUNAKEE** (6P3) 1 S UTC-6(-5DT) N43°10.72' W89°27.08'

CHICAGO

954 FUEL 100LL TPA-1954(1000) NOTAM FILE GRB

RWY 09-27: H2223X30 (ASPH) LIRL (NSTD)

RWY 27: Thld dsplcd 146'. Building.

**AIRPORT REMARKS:** Unattended. For fuel call 608-225-1109. ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09-27 NSTD LIRL 165' from E end; 155' from W end. 1910' of rwy is lgtd. Rwy lgts approximately 60' from pavement edge. Rwy 27 NSTD dsplcd thld markings.

**COMMUNICATIONS:** CTAF 122.9





**WAUTOMA MUNI** (Y5Ø) 2 SW UTC-6(-5DT) N44°02.50' W89°18.27'**GREEN BAY**

859 B S4 FUEL 100LL NOTAM FILE GRB

**L-28H****RWY 13-31:** H3300X60 (ASPH) S-12.5 MIRL**IAP****RWY 13:** Trees. **RWY 31:** Tree.**RWY 08-26:** 2280X150 (TURF)**RWY 08:** Trees. **RWY 26:** Trees.**RWY 05-23:** H1190X35 (ASPH)**RWY 05:** Trees. **RWY 23:** Trees.

**AIRPORT REMARKS:** Attended May-Sep 1300-0200Z±, Oct-Apr 1300-0000Z±. 24 hour self svc fuel. **Rwy 08-26** CLOSED winter months except for ski equipped acft. **Rwy 08-26 East 430'** CLOSED in winter. Waterfowl and deer on and in/ovf arpt. Ultralights on and in/ovf arpt. **MIRL Rwy 13-31** preset on low ints; to increase ints **ACTIVATE**—CTAF. **Rwy 08-26** ends marked with white markers.

**COMMUNICATIONS:** CTAF/UNICOM 122.8

Ⓡ **MILWAUKEE APP/DEP CON** 127.0

**RADIO AIDS TO NAVIGATION:** NOTAM FILE STE.**STEVENS POINT (L) VORTAC** 110.6 STE Chan 43 N44°32.60' W89°31.83' 163° 31.6 NM to fld. 1110/2E.**HIWAS.****WEST BEND****HAHN SKY RANCH** (2T5) 5 NW UTC-6(-5DT) N43°27.98' W88°17.46'**CHICAGO**

1090 S2 NOTAM FILE GRB

**RWY 10-28:** 2900X60 (TURF)**RWY 10:** Brush. **RWY 28:** Tree.**AIRPORT REMARKS:** Unattended. **Rwy 10-28** has soft areas approximately 1000' from W end.**Rwy 10-28** surface rough and rolling. Ultralight activity on and in/ovf arpt. **Rwy 10-28** thld not marked.**COMMUNICATIONS:** CTAF 122.9**WEST BEND MUNI** (ETB) 3 E UTC-6(-5DT) N43°25.33' W88°07.68'**CHICAGO**

887 B S4 FUEL 100LL, JET A TPA-1887(1000) NOTAM FILE ETB

**L-28H****RWY 13-31:** H4494X75 (ASPH) S-15 MIRL 0.3% up NW**IAP****RWY 13:** REIL. VASI(V4L)—GA 3.0° TCH 37'. Road. **RWY 31:** REIL. VASI(V2L)—GA 3.0° TCH 28'. Trees.**RWY 06-24:** H3897X75 (ASPH) S-12 MIRL 0.3% up SW**RWY 06:** Tree. **RWY 24:** Road.

**AIRPORT REMARKS:** Attended 1300Z±-dusk. 100' crane 400' SW AER 13 Mon-Fri 1700-0500Z±. **MIRL Rws 06-24** and **13-31** preset on low ints; to increase ints and **ACTIVATE REIL Rws 13-31**; **VASI Rws 13** and **31**—CTAF.

**WEATHER DATA SOURCES:** AWOS-3 120.0 (262) 334-6161.**COMMUNICATIONS:** CTAF/UNICOM 122.8**RCO 122.1R 109.8T** (GREEN BAY RADIO)

Ⓡ **MILWAUKEE APP/DEP CON** 125.35 **CLNC DEL** 124.75

**RADIO AIDS TO NAVIGATION:** NOTAM FILE MKE.**BADGER (H) VORTACW** 116.4 BAE Chan 111 N43°07.01' W88°17.06' 018° 19.6 NM to fld. 1080/2E.**HIWAS.**(T) **VOR** 109.8 **BJB** N43°25.32' W88°07.51' at fld. NOTAM FILE ETB.**KETTLE MORAINÉ NDB (MHW)** 329 LLE N43°25.51' W88°07.63' at fld. NOTAM FILE ETB. Unmonitored.**SHUTDOWN.****ILS** 108.9 1-ETB **Rwy 31.** LOC monitored 1300-0300Z± daily.**COMM/NAV/WEATHER REMARKS:** AWOS-3 ceiling unreliable.

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**HELIPAD H1:** H100X100 (ASPH)

**HELIPORT REMARKS:** When using military helipad military helicopters use pattern to the N or W of arpt. **Helipad H1** blue perimeter lgts.

**WESTOTSHA** (See WILMOT)**WHITewater****GUTZMER'S TWIN OAKS** (5Y3) 1 NW UTC-6(-5DT) N42°51.21' W88°45.59'**CHICAGO**

821 TPA-1621(800) NOTAM FILE GRB

**RWY 18-36:** 2523X140 (TURF) LIRL (NSTD)**RWY 18:** Trees.

**AIRPORT REMARKS:** Attended Apr-Nov 1400Z±-SS. **Rwy 18-36** not plowed winters. Arpt CLOSED to wheeled acft when rwy snow covered. Extensive ultralight and hang glider ops on and in/ovf arpt. **Rwy 18-36** not sanded or plowed.

**Rwy 18-36** thld marked with white and orange L-shaped wooden A-frames. **Rwy 18-36 NSTD LIRL**; lgts not on frangible mounts.**COMMUNICATIONS:** CTAF 122.9

**WICKR** N45°19.05' W91°48.17' NOTAM FILE RPD.  
**NDB (LOM)** 221 RP 010° 6.3 NM to Rice Lake Rgnl-Carl's Fld.

**WILD ROSE IDLEWILD** (W23) 2 NE UTC-6(-5DT) N44°11.87' W89°13.07' **CHICAGO**  
 908 B NOTAM FILE GRB  
**RWY 09-27:** 2990X100 (TURF) RWY LGTS (NSTD)  
**RWY 09:** Tree. **RWY 27:** Tree.  
**RWY 18-36:** 1695X100 (TURF)  
**RWY 18:** Trees. **RWY 36:** Trees.  
**AIRPORT REMARKS:** Unattended. Rwy 18-36 CLOSED Nov 15 thru Apr 1. Ultralight activity on and invof arpt. Deer and cranes on and invof arpt. Rwy 09-27 plowed winter months. Rwy 9-27 NSTD thld lgts. ACTIVATE LIRL Rwy 09-27—CTAF. Rwy 09 thld lgts OTS indef. Rwy 18-36 marked with black and yellow panels. Rwy 09-27 marked with yellow panels and orange edge markers. Rwy 27 additional obstruction road 0' from thld 90' right; apch ratio 0:1.  
**COMMUNICATIONS:** CTAF/UNICOM 122.8

**WILMOT**

**WESTOSHA** (5K6) 1 W UTC-6(-5DT) N42°30.85' W88°12.31' **CHICAGO**  
 850 B S4 **FUEL** 100LL TPA—1500(650) NOTAM FILE GRB  
**RWY 03-21:** H2849X38 (ASPH-CONC) LIRL (NSTD)  
**RWY 03:** Thld dsplcd 36'. Road. **RWY 21:** Thld dsplcd 9'.  
**RWY 14-32:** 1517X45 (TURF)  
**RWY 14:** Fence. **RWY 32:** Trees.  
**AIRPORT REMARKS:** Attended 1400-0000Z+. Rwy 14-32 CLOSED Nov 15 thru Mar 31. Arpt has noise abatement procedures ctc arpt manager on 262-862-6111. Rwy 03-21 SW 400' conc and NE 27' conc rest of rwy asph. Rwy 03-21 has a 60' drop-off 10' from NE end. ACTIVATE LIRL Rwy 03-21—CTAF. ACTIVATE rotating bcn—CTAF. Rwy 14-32 A-frames painted orange and white. Rwy 03-21 NSTD LIRL; Rwy 03 thld lgts 3 each side; Rwy 21 1 light each side.  
**COMMUNICATIONS:** CTAF/UNICOM 123.0

**WISCONSIN RAPIDS** NOTAM FILE ISW. **GREEN BAY**  
**NDB (MHW)** 215 ISW N44°21.84' W89°50.39' at Alexander Fld South Wood Co. **L-286**  
**RCO** 122.45 (GREEN BAY RADIO)

**WISCONSIN RAPIDS****ALEXANDER FLD SOUTH WOOD CO**

(ISW) 1 S UTC-6(-5DT) N44°21.62' W89°50.34'

**GREEN BAY**

H-2J, L-286

IAP

1021 B FUEL 100LL, JET A TPA—See Remarks NOTAM FILE ISW

RWY 02-20: H5500X100 (ASPH) S-40, D-60 MIRL

RWY 02: REIL. PAPI(P4L)—GA 3.0° TCH 50'. Trees.

RWY 20: REIL. PAPI(P4L)—GA 3.0° TCH 50'. Tree.

RWY 11-29: H3640X50 (ASPH) S-12, D-20 MIRL

RWY 11: Road.

RWY 29: PAPI(P4L)—GA 4.0° TCH 50'. Thld displcd 170'. Trees.

RWY 18-36: 2100X50 (TURF)

RWY 18: Tree. RWY 36: Trees.

**AIRPORT REMARKS:** Attended May-Sep 1400-2330Z†, Oct-Apr 1400-2300Z†. Birds on and in/ovf arpt. ACTIVATE MIRL Rwy 02-20; MIRL Rwy 11-29; REIL Rwy 02 and Rwy 20; PAPI Rwy 02; Rwy 20 and Rwy 29—CTAF. Rwy 18-36 marked with yellow metal triangles. Ultralight acft must have an operating altimeter, two-way radio, use ultralight ops area (Rwy 18-36), avoid overflight of hard surface rwys. Ultralight acft must have an operating altimeter and two-way radio. Ultralight ops area posted at terminal building or call 715-424-3737. Ultralights use rgt tfc for Rwys 02, 20 and 11 and left tfc for Rwy 29. When ultralight opns are clsd, ultralights use rgt tfc for Rwy 02, Rwy 20 and Rwy 11 and left tfc for Rwy 29. When Rwy 18-36 is closed ultralights may use Rwy 02-20 and Rwy 11-29. TPA: ultralight TPA 1521(500).

**WEATHER DATA SOURCES:** ASOS 126.575 (715) 421-2120.**COMMUNICATIONS:** CTAF/UNICOM 122.8

WISCONSIN RAPIDS RCO 122.45 (GREEN BAY RADIO)

® MINNEAPOLIS CENTER APP/DEP CON 124.4

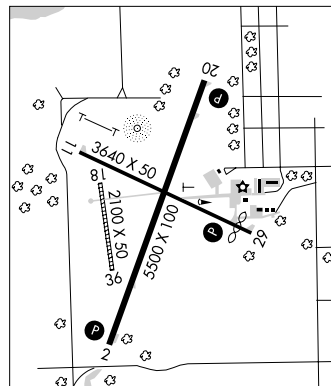
**RADIO AIDS TO NAVIGATION:** NOTAM FILE STE.

STEVENS POINT (L) VORTAC 110.6 STE Chan 43 N44°32.60' W89°31.83' 231° 17.2 NM to fld. 1110/2E. HIWAS.

WISCONSIN RAPIDS NDB (MHW) 215 ISW N44°21.84' W89°50.39' at fld. NOTAM FILE ISW.

NEPCO NDB (LOM) 326 EK N44°15.59' W89°53.27' 020° 6.4 NM to fld. Unmonitored.

SEF 108.7 EKP Rwy 02 LOM NEPCO NDB. Unmonitored.

**WITTMAN RGNL** (See OSHKOSH)**WONEWOC****THREE CASTLES AIRPARK**

(4D1) 1 NW UTC-6(-5DT) N43°40.20' W90°13.96'

**CHICAGO**

921 TPA—1921(1000) NOTAM FILE GRB

RWY 10-28: 2740X90 (TURF)

RWY 10: Tree. RWY 28: Trees.

**AIRPORT REMARKS:** Unattended.**COMMUNICATIONS:** CTAF 122.9**WOODRUFF** N45°53.33' W89°36.43'**GREEN BAY**

RCO 122.6 (GREEN BAY RADIO)

L-10H, 12E

**YANKS** N43°03.60' W87°52.61' NOTAM FILE MKE.**CHICAGO**

NDB (MHW/LOM) 260 BL 189° 6.8 NM to General Mitchell Intl. Unmonitored.

A

### 2009 U.S. & CANADIAN MILITARY AERIAL AIRCRAFT/PARACHUTE DEMONSTRATIONS

During CY 2009, the U.S. and Canadian Military Aerial Demonstration Teams (Thunderbirds, Blue Angels, Snowbirds, and Golden Knights) will be performing on the dates and locations listed below.

Pilots should expect Temporary Flight Restrictions (TFR) in accordance with 14 CFR Section 91.145, Management of aircraft operations in the vicinity of aerial demonstrations and major sporting events. The dimensions and effective times of the TFRs may vary based upon the specific aerial demonstration event and will be issued via the U.S. NOTAM system. Pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding these airspace restrictions.

The currently scheduled 2009 aerial demonstration locations, subject to change without notice, are:

| DATE:    |       | USAF Thunderbirds | USN Blue Angels        | Canadian Snowbirds | USA Golden Knights |
|----------|-------|-------------------|------------------------|--------------------|--------------------|
| October  | 24-25 |                   | Fort Worth, TX         |                    | Fort Worth, TX     |
|          | 24-25 |                   |                        |                    | Pinehurst, NC      |
|          | 31    |                   | Houston, TX            |                    |                    |
| November | 1     |                   | Houston, TX            |                    |                    |
|          | 7-8   | Homestead AFB, FL | Jacksonville Beach, FL |                    |                    |
|          | 13-14 |                   | NAS Pensacola, FL      |                    |                    |
|          | 14-15 | Nellis AFB, NV    |                        |                    |                    |

Note: Dates and locations are scheduled "show dates" only and do not reflect arrival or practice date TFR periods that may precede the specific aerial demonstration events listed above. Again, pilots are strongly encouraged to check FDC NOTAMs to verify they have the most current information regarding any airspace restrictions.

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## MODEL ROCKET ACTIVITY IN ILLINOIS

### Hillsboro Municipal Airport (3K4), Hillsboro, IL

Model Rocket activity will be conducted within a 2 NM radius of the VLA273011, SFC to 8,000 Feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### Tuscola Airport (K96), Tuscola, IL

Model Rocket activity will be conducted within a 2 NM radius of Tuscola Airport (K96), SFC to 10,000 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

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## AEROBATIC PRACTICE AREAS IN ILLINOIS

### Litchfield Municipal Airport (3LF), Litchfield, IL

Aerobatic practice will be conducted within 2 NM radius of Litchfield Municipal Airport (3LF), from 1,700 feet MSL to 4,200 feet MSL. The practice area is for waiver holders only. Pilots should use caution when opr within this area. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### Smith Airport (LL27), Macomb, IL

Aerobatic practice will be conducted within 2 NM radius of Smith Airport (LL27), SFC to 4,100 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### Williamson County Regional Airport (MWA), Marion, IL

Aerobatic practice will be conducted within 1 NM radius of Williamson County Regional Airport (MWA), SFC to 5,000 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### Pinckneyville-DuQuoin Airport (PJY), Pinckneyville, IL

Aerobatic practice will be conducted within 2 NM radius of Pinckneyville-DuQuoin Airport (PJY), SFC to 3,900 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

### Springfield IL, Abraham Lincoln Capital Airport (SPI)

Aerobatic practice will be conducted within 1.5 NM radius of Springfield VOR SPI160010, from 2,100 feet MSL to 4,600 feet MSL, SR-SS. For further information contact Flight Services at 1-800-WX-BRIEF (992-7433).

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## AEROBATIC PRACTICE AREA

### Norris Field (8I2), Richmond, IN

Aerobatic Flight Activity will be conducted within 1 (one) NM radius of the Richmond (RID) VORTAC 193R/6 DME. Flights will occur from 800' AGL to 3,500' AGL. Pilots should use caution when operating within this area. For further information, Contact Dayton APP CON at 1-937-454-7310 or freq. 134.45.

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## AEROBATIC PRACTICE AREA

### Skyway Estates Airport (60G), Eaton Rapids, MI

Aerobatic Flight Activity will be conducted within a 1 (one) NM radius of the Lansing (LAN) VORTAC 171R/8DME. Flights will occur from SR to SS from 2,500 MSL to 6,000 MSL.

Pilots should use caution when operating within this area. For further information, contact Lansing ATCT at 1-517-321-1355 or freq. 119.9.

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### Search Light Activity Dayton, OH

Search light activity will be conducted at the Dayton Schuster Performing Arts Center, Dayton, OH (FFO VORTAC 241/7.23, Lat 39-45-39.56N, Lon 084-11-32.94W) at and above 1500 MSL, from dusk until midnight. Searchlight beams may be injurious to pilots/passengers eyes at 1500 MSL and above. Flash blindness or cockpit illumination may occur at greater distances, to several miles. For further information, contact Dayton AFSS at 937-454-8398.

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**COMMUNICATIONS ADVISORIES****Indianapolis ARTCC****NABB INDIANA AREA****New Hope, London, Lexington Kentucky Area**

Indianapolis Center has installed frequencies in the southern portion of their airspace that require 720-channel radio capability.

Pilots should be aware that if they fly in the Nabb, IN, or the New Hope, London, and Lexington, KY, area without a 720-channel radio, ATC services will be greatly reduced. Traffic advisories, weather information, airport information, along with any other direct communication services will not be available.

While in this area of Indianapolis Center, pilots without 720-channel capability will, in most cases, monitor Flight Service Stations. There will be a noticeable delay in all clearance activity. Please ensure that ATC has adequate lead time in the event of problems or clearance requirements.

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**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS  
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)  
CHICAGO, ILLINOIS**

Chicago O'Hare International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 10 at Taxiway ZH  
Runway 14L at Taxiway U2  
Runway 14L at Taxiway V  
Runway 28 at Taxiway ZY  
Runway 28 at Taxiway ZV  
Runway 32R at Taxiway V  
Runway 32L at Taxiway T10  
Runway 32L at Taxiway M

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower unless the aircraft's position can be verified by the Airport Surface Detection Equipment (ASDE) prior to the issuance of a departure clearance. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only, departures shall not be permitted from any point on the runway other than the intersections listed above, and only one aircraft at a time is permitted to taxi into position and hold on each respective runway.

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**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS  
INDIANAPOLIS INTERNATIONAL AIRPORT (IND)  
INDIANAPOLIS, INDIANA**

Indianapolis International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersections listed below.

Runway 23L at Taxiways "C2" and "D2"  
Runway 23R at Taxiways "A2" and "B2"

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runways shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise. However, aircraft cannot be taxied into "position and hold" prior to takeoff clearance.

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**INTERSECTION DEPARTURES DURING PERIOD OF DARKNESS  
GENERAL MITCHELL INTERNATIONAL AIRPORT (MKE)  
MILWAUKEE, WISCONSIN**

Milwaukee Mitchell International Airport Traffic Control Tower has been granted a waiver to the guideline that prohibits the control tower from taxiing an aircraft into "position and hold" at an intersection, between sunset and sunrise.

This waiver allows the tower to taxi the aircraft into "position and hold" during period of darkness, at the intersection listed below.

**Runway 19R at Taxiway Victor**

Aircraft shall not taxi into position and hold under the provisions of this waiver when the subject intersection is not visible from the tower. When the provisions of this waiver are being exercised, the affected runway shall be used for departures only. Intersection departures will continue to be utilized at other locations between sunset and sunrise.

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**INTERSECTING RUNWAY OPERATIONS**

**CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)  
CHICAGO, ILLINOIS**

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct intersecting runway operations to Runway 28 and Runway 14R whereby an aircraft departing Runway 28 shall be through the intersection of Runway 14R prior to the arriving aircraft on Runway 14R reaching a point no closer than 5,000 feet from the intersection of both runways.

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**SIMULTANEOUS OPPOSITE DIRECTION OPERATIONS  
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)  
CHICAGO, ILLINOIS**

Chicago O'Hare International (ORD) Airport Traffic Control Tower (ATCT) has been authorized to conduct arrivals to Runways 14L & 14R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions. ORD ATCT is authorized to conduct simultaneous converging instrument approaches to runways 14R & 22R while conducting simultaneous opposite direction departures off of runways 09R & 28 during IFR weather conditions.

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**SIMULTANEOUS ILS APPROACHES WITH ONE GLIDE SLOPE OUT OF SERVICE  
CHICAGO O'HARE INTERNATIONAL AIRPORT (ORD)  
CHICAGO, ILLINOIS**

Chicago O'Hare International Airport Traffic Control Tower and Chicago TRACON have been authorized to conduct independent simultaneous ILS approaches with the glide slope of one parallel runway inoperative.

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**ILS PRM (SIMULTANEOUS CLOSE PARALLEL) PROCEDURE FOR  
PILOTS FILING FLIGHT PLANS TO CLEVELAND-HOPKINS  
INTERNATIONAL (CLE)**

Effective Thursday, May 12, 2005. During the hours of 0700-2200 local, CLE ATCT may utilize ILS PRM and LDA PRM apchs to Runways 6L/6R as weather and arrival traffic demand dictate. Aircraft arriving from the west and north (primarily over ZABER and HIMEZ INT.) should expect ILS PRM Runway 6L, aircraft arriving from the east and south (primarily over CXR and KEATN INT.) should expect LDA PRM Runway 6R. If unable to participate in PRM apchs acft operators are required to contact FAA ATCSCC directly at 1-800-333-4286 or at 703-904-4452 prior to departure to obtain a pre-coordinated arrival time. Non-participating acft may encounter DLAS attributable to PRM flow. Pilot requirements and procedures are outlined in the U.S. Terminal Procedures Publications on the pages entitled Attention All Users of ILS Precision Runway Monitor (PRM) or LDA Precision Runway Monitor (PRM).

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**SPECIAL NORTH ATLANTIC, CARIBBEAN AND  
PACIFIC AREA COMMUNICATIONS**

VHF air-to-air frequencies enable aircraft engaged in flights over remote and oceanic areas out of range of VHF ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

Frequencies have been designated as follows:

|                      |            |
|----------------------|------------|
| North Atlantic area: | 123.45 MHz |
| Caribbean area:      | 123.45 MHz |
| Pacific area:        | 123.45 MHz |

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### **CHICAGO, ILLINOIS CHICAGO O'HARE VOR/DME**

DME unlocks can occur periodically due to ground station overload when more than 100 aircraft interrogations are received at the same time. The problem may occur when aircraft are being held in the Chicago (O'Hare) terminal area awaiting approach clearance at O'Hare. Possibilities of the problem occurring are reduced by users deactivating interrogators during nonuse or switching to an ILS DME whenever possible. Deactivating interrogators on the ground is especially important since nearby aircraft cause more overload than distant ones.

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### **MILITARY TRAINING ROUTES**

The DOD Flight Information Publication AP/1B provides textual and graphic descriptions and operating instructions for all military training routes (IR, VR, SR) and refueling tracks/anchors. Complete and more comprehensive information relative to policy and procedures for IRs and VRs is published in FAA Handbook 7610.4 (Special Military Operations) which is agreed to by the DOD and therefore directive for all military flight operations. The AP/1B is the official source of route data for military users.

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### **CIVIL USE OF MILITARY FIELDS**

U.S. Army, Air Force, Navy and Coast Guard Fields are open to civil fliers only in emergency or with prior permission.

Army installations, prior permission is required from the Commanding Officer of the installation.

For Air Force installations, prior permission should be requested at least 30 days prior to first intended landing from either Headquarters USAF (PRPOC) or the Commander of the installation concerned (who has authority to approve landing rights for certain categories of civil aircraft). For use of more than one Air Force installation, requests should be forwarded direct to Hq USAF (PRPOC), Washington, D.C. 20330.

Use of USAF installations must be specifically justified.

For Navy and Marine Corps installations, prior permission should be requested at least 30 days prior to first intended landing.

An Aviation Facility License must be approved and executed by the Navy prior to any landing by civil aircraft.

Forms and further information may be obtained from the U.S. Navy or Marine Corps aviation activity.

For Coast Guard fields prior permission should be requested from the Commandant, U.S. Coast Guard via the Commanding Officer of the field.

When instrument approaches are conducted by civil aircraft at military airports, they shall be conducted in accordance with the procedures and minimums approved by the military agency having jurisdiction over the airport.

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### **AIRCRAFT LANDING RESTRICTIONS**

Landing of aircraft at locations other than public use airports may be a violation of Federal or local law. All land and water areas are owned or controlled by private individuals or organizations, states, cities, local governments, or U.S. Government agencies. Except in emergency, prior permission should be obtained before landing at any location that is not a designated public use airport or seaplane base.

Landing of aircraft is prohibited on lands and waters administered by the National Park Service, U.S. Fish and Wildlife Service, U.S. Forest Service, and on many areas controlled by the U.S. Army Corps of Engineers, unless prior authorization is obtained from the respective agency.

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## CONTINUOUS POWER FACILITIES

In order to insure that a basic ATC system remains in operation despite an areawide or catastrophic commercial power failure, key equipment and certain airports have been designated to provide a network of facilities whose operational capability can be utilized independent of any commercial power supply.

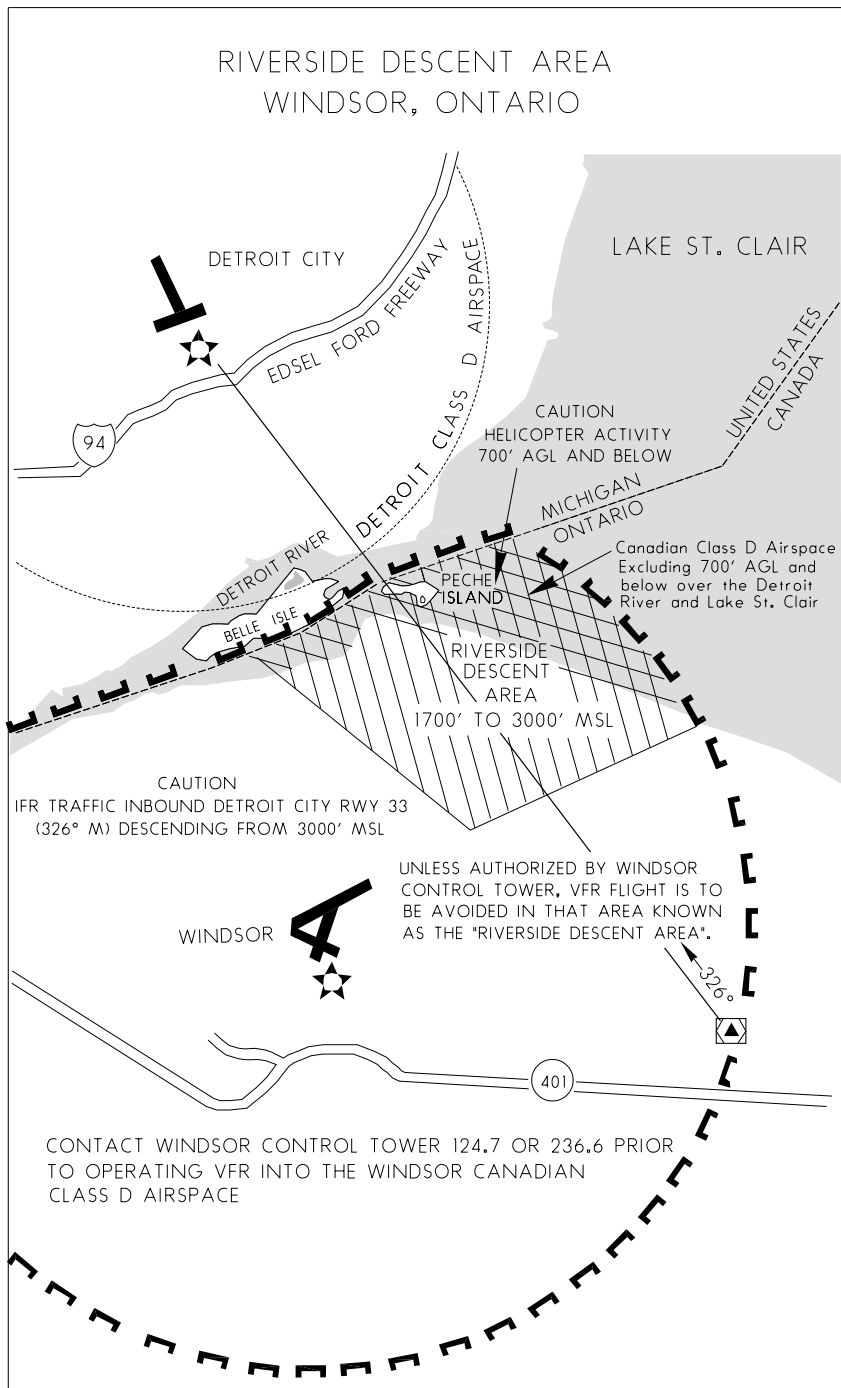
In addition to those facilities comprising the basic ATC system, the following approach and lighting aids have been included in this program for a selected runway.

1. ILS (Localizer, Glide Slope, COMLO, Inner, Middle and Outer Markers)
2. Wind Measuring Capability
3. Approach Light System (ALS) or Short ALS (SALS)
4. Ceiling Measuring Capability
5. Touchdown Zone Lighting (TDZL)
6. Centerline Lighting (CL)
7. Runway Visual Range (RVR)
8. High Intensity Runway Lighting (HIRL)
9. Taxiway Lighting
10. Apron Light (Perimeter Only)

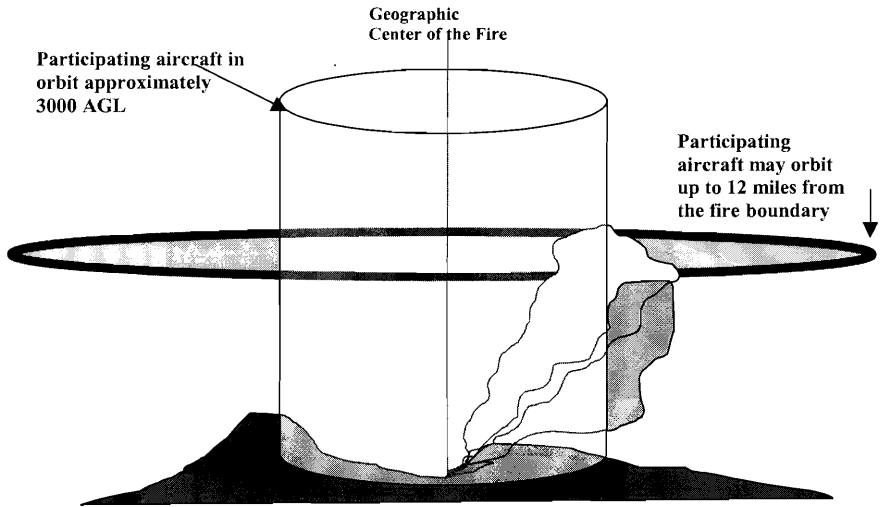
The following have been designated "Continuous Power Airports," and have independent back up capability for the equipment installed.

| Airport/Ident                     | Runway No. | Airport/Ident                  | Runway No. |
|-----------------------------------|------------|--------------------------------|------------|
| Albuquerque, NM (ABQ) .....       | 08         | Milwaukee, WI (MKE) .....      | 01L        |
| Anchorage, AK (ANC) .....         | 07R        | Minneapolis, MN (MSP) .....    | 30L        |
| Andrews AFB, MD (ADW) .....       | 01L        | Nashville, TN (BNA) .....      | 02L        |
| Atlanta, GA (ATL) .....           | 09R        | New Orleans, LA (MSY) .....    | 10         |
| Baltimore, MD (BWI) .....         | 10         | New York, NY (JFK) .....       | 04R        |
| Bismarck, ND (BIS) .....          | 31         | New York, NY (LGA) .....       | 22         |
| Boise, ID (BOI) .....             | 10R        | Newark, NJ (EWR) .....         | 04R        |
| Boston, MA (BOS) .....            | 04R        | Oklahoma City, OK (OKC) .....  | 35R        |
| Charlotte, NC (CLT) .....         | 36L        | Omaha, NE (OMA) .....          | 14R        |
| Chicago, IL (ORD) .....           | 14R        | Ontario, CA (ONT) .....        | 26L        |
| Cincinnati, OH (CVG) .....        | 36C        | Philadelphia, PA (PHL) .....   | 09R        |
| Cleveland, OH (CLE) .....         | 06R        | Phoenix, AZ (PHX) .....        | 08         |
| Dallas/Fort Worth, TX (DFW) ..... | 17C        | Pittsburgh, PA (PIT) .....     | 10L        |
| Denver, CO (DEN) .....            | 35R        | Reno, NV (RNO) .....           | 16R        |
| Des Moines, IA (DSM) .....        | 31         | Salt Lake City, UT (SLC) ..... | 34L        |
| Detroit, MI (DTW) .....           | 03R        | San Antonio, TX (SAT) .....    | 12R        |
| El Paso, TX (ELP) .....           | 22         | San Diego, CA (SAN) .....      | 09         |
| Fairbanks, AK (FAI) .....         | 01L        | San Francisco, CA (SFO) .....  | 28R        |
| Great Falls, MT (GTF) .....       | 03         | San Juan, PR (SJU) .....       | 08         |
| Honolulu, HI (HNL) .....          | 08L        | Seattle, WA (SEA) .....        | 16C        |
| Houston, TX (IAH) .....           | 26L        | St. Louis, MO (STL) .....      | 30R        |
| Indianapolis, IN (IND) .....      | 05L        | Tampa, FL (TPA) .....          | 36L        |
| Jacksonville, FL (JAX) .....      | 07         | Tulsa, OK (TUL) .....          | 36R        |
| Kansas City, MO (MCI) .....       | 19R        | Washington, DC (DCA) .....     | 01         |
| Los Angeles, CA (LAX) .....       | 24R        | Washington, DC (IAD) .....     | 01R        |
| Memphis, TN (MEM) .....           | 36L        | Wichita, KS (ICT) .....        | 01L        |
| Miami, FL (MIA) .....             | 08R        |                                |            |

**NOTE**—The existing CPA runway is listed. Pending and future changes at some locations will require a revised runway designation.



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**FIREFIGHTING TRAFFIC AREAS**

Pilots are advised to stay clear of Firefighting Traffic Areas. Remain 15 miles from the area of activity. If you must over-fly the area, do so at an altitude of 5000 feet AGL above. However, to remain safe and out of the way of working aircraft, it is best to circumnavigate the area.

The wild-land fire environment can be very complex and involve a large number and variety of aircraft types including fixed and rotary wing aircraft. Some of the aircraft are small single and multi-engine command and control platforms that can be especially difficult to see and may give the appearance that the fire is not staffed. The aircraft participating in firefighting can orbit as far out as 12 miles from the perimeter of the fire. Any intrusion by aircraft not directly involved in the firefighting operation could delay the delivery of much needed retardant or water to ground firefighters and will adversely affect the safety of participating aircraft. Please stay well away from wild-land fires even if you feel that aircraft are not working the fire; they may be en route or unseen.

If you see a fire developing along your route, report it immediately to air traffic control who will advise the US Forest Service. The firefighting community would welcome this information.

The following narratives summarize the FAR Part 93 Special Air Traffic Rules, and Airport Traffic Patterns in effect as prescribed in the rule. This information is advisory in nature and in no way relieves the pilot from compliance with the specific rules set forth in FAR Parts 91 and 93.

Special Airport Traffic Areas prescribed in Part 93 are depicted on Sectional Aeronautical Charts, World Aeronautical Charts, Enroute Low Altitude Charts, and where applicable, on VFR Terminal Area Charts.

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### **LORAIN (ELYRIA), OHIO**

#### **LORAIN COUNTY AIRPORT TRAFFIC RULE**

Part 93, Subpart J, requires each person piloting an airplane landing at the Lorain County Rgnl Airport shall enter the traffic pattern north of the airport and shall execute a right traffic pattern for a landing to the southwest or a left traffic pattern for a landing to the northeast. Each person taking off from the airport shall execute departure turn to the north as soon as practicable after takeoff.

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### **OPERATIONS RESERVATIONS FOR HIGH DENSITY TRAFFIC AIRPORTS**

#### **KENNEDY, LAGUARDIA, AND WASHINGTON REAGAN NATIONAL**

The Federal Aviation Administration (FAA) has designated New York's Kennedy and LaGuardia Airports and Washington Reagan National Airport as High Density Traffic Airports (HDTA), Title 14, Code of Federal Regulations, part 93, subpart K, and has prescribed air traffic rules and requirements for operating aircraft (excluding helicopters) to and from those airports during certain hours.

Reservations are required for operations from 6 a.m. through 11:59 p.m. local time at LaGuardia Airport and Washington Reagan National Airport. Reservations at Kennedy Airport are required from 3 p.m. through 7:59 p.m. local time.

Reservation procedures are detailed in Advisory Circular 93-1, Reservations for Unscheduled Operations at High Density Traffic Airports. A copy of the advisory circular is available on the FAA website at <http://www.faa.gov>. Reservations for unscheduled operations are allocated through the Enhanced Computer Voice Reservation System (e-CVRS) accessible via telephone or the Internet. This system may not be used to make reservations for scheduled air carrier or commuter flights.

The toll-free telephone number for accessing e-CVRS is 1-800-875-9694 and is available for calls originating within the United States, Canada, and the Caribbean. Users outside the toll-free areas may access e-CVRS by calling the toll number of 703-707-0568. The Internet web address for accessing the e-CVRS is <http://www.fly.faa.gov/ecvrs>. If you have any questions about reservation requirements or are experiencing problems with the system, you may telephone the Airport Reservation Office at the Air Traffic Control System Command Center at (703) 904-4452.

Requests for instrument flight rules (IFR) reservations will be accepted beginning 72 hours prior to the proposed time of operation at the high-density airport. For example, a request for an 11 a.m. reservation on a Thursday will be accepted beginning at 11 a.m. on the previous Monday.

IFR reservations must be obtained prior to IFR landing or takeoff at an HDTA during slot controlled hours. An air traffic control (ATC) clearance does not constitute a reservation. A reservation does not constitute permission to operate at an HDTA if additional operational limits or procedures are required by NOTAM and/or regulation.

Aircraft involved in medical emergencies will be handled by ATC without regard to a reservation after obtaining prior approval of the ATC System Command Center on (703) 904-4452. ATC will accommodate declared other emergency situations without regard to slot reservations.

**NOTE:** Visual flight rule (VFR) reservations via ATC for unscheduled operations at LaGuardia are not authorized from 7 a.m. through 8:59 a.m. local time and 4 p.m. through 6:59 p.m. local time, Monday through Friday and Sunday evenings, unless otherwise announced by NOTAM. Both IFR and VFR operations during those time periods must obtain an advance reservation through e-CVRS.

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## FSS TELEPHONE NUMBERS

**Flight Service Station (FSS)** facilities provide flight planning and weather briefing services to pilots. FSS services in the contiguous United States, Hawaii and Puerto Rico, are provided by a network of large hub facilities and smaller remote facilities which are interconnected with the hubs.

**Selected remote FSS** facilities across the contiguous United States have variable part-time operating hours. Because of the interconnectivity between remote and hub facilities, all FSS services are available continuously using published telephone numbers and radio frequencies.

### EAST CENTRAL U.S.

**ILLINOIS:** Kankakee, Greater Kankakee (IKK)—**IKK FSS**

**MICHIGAN:** Lansing, Capital City (LAN)—**LAN FSS**

**Telephone Information Briefing Service (TIBS)** is the FSS service that provides continuous recordings of meteorological and/or aeronautical information including area and/or route briefings, airspace procedures and special announcements. A touch-tone telephone is required to fully utilize this service.

Further information can be found in the Aeronautical Information Manual (AIM).

### NATIONAL FSS TELEPHONE NUMBER

Pilot Weather Briefings ..... 1-800-WX-BRIEF (1-800-992-7433)

### OTHER FSS TELEPHONE NUMBERS (except in Alaska)

TIBS (see description above) ..... 1-800-4TIBS-WX (1-877-484-2799)

Clearance Delivery Only ..... 1-888-766-8267

Lifeguard Flights Only ..... 1-877-LIF-GRD3 (1-877-543-4733)

Flights within DC SFRA & FRZ \* ..... 1-866-225-7410

\* District of Columbia Special Flight Rules Area & Flight Restricted Zone

# **KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)**

**TAF** KPIT 091730Z 091818 15005KT 5SM HZ.FEW020 WS010/31022KT  
FM1930 30015G25KT 3SM SHRA OVC015 TEMPO 2022 1/2SM +TSRA  
OVC008CB  
FM0100 27008KT 5SM SHRA BKN020 OVC040 PROB40 0407 1SM -RA BR  
FM1015 18005KT 6SM -SHRA OVC020 BECMG 1315 P6SM NSW SKC

**METAR** KPIT 091955Z COR 22015G25KT 3/4SM R28L/2600FT TSRA OVC010CB  
18/16 A2992 RMK SLP045 T01820159

| Forecast       | Explanation  | Report             |
|----------------|--|--------------------|
| <b>TAF</b>     | Message type: <u>TAF</u> -routine or <u>TAF AMD</u> -amended forecast, <u>METAR</u> -hourly, <u>SPECI</u> -special or <u>TESTM</u> -non-commissioned ASOS report   | <b>METAR</b>       |
| <b>KPIT</b>    | ICAO location indicator  | <b>KPIT</b>        |
| <b>091730Z</b> | Issuance time: ALL times in UTC " <u>Z</u> ", 2-digit date, 4-digit time   | <b>091955Z</b>     |
| <b>091818</b>  | Valid period: 2-digit date, 2-digit beginning, 2-digit ending times  |                    |
|                | In U.S. <b>METAR</b> : <u>COR</u> rected ob; or <u>AUTO</u> mated ob for automated report with no human intervention; omitted when observer logs on  | <b>COR</b>         |
| <b>15005KT</b> | Wind: 3 digit true-north direction, nearest 10 degrees (or <u>Varia</u> ble); next 2-3 digits for speed and unit, <u>KT</u> (KMH or MPS); as needed, <u>Gust</u> and maximum speed; 00000KT for calm; for <b>METAR</b> , if direction varies 60 degrees or more, <u>Variability</u> appended, e.g. 180 <u>V</u> 260  | <b>22015G25KT</b>  |
| <b>5SM</b>     | Prevailing visibility: in U.S., <u>Statute Miles</u> & fractions; above 6 miles in <b>TAF</b> <u>Plus</u> 6SM. (Or, 4-digit minimum visibility in meters and as required, lowest value with direction)   | <b>3/4SM</b>       |
|                | Runway Visual Range: <u>R</u> ; 2-digit runway designator <u>Left</u> , <u>Center</u> , or <u>Right</u> as needed; <u>"</u> / <u>"</u> ; <u>Minus</u> or <u>Plus</u> in U.S., 4-digit value, <u>Feet</u> in U.S., (usually meters elsewhere); 4-digit value <u>Variability</u> 4-digit value (and tendency <u>Down</u> , <u>Up</u> or <u>No change</u> )   | <b>R28L/2600FT</b> |
| <b>HZ</b>      | Significant present, forecast and recent weather: see table (on back)  | <b>TSRA</b>        |
| <b>FEW020</b>  | Cloud amount, height and type: <u>SKY</u> Clear 0/8, <u>FEW</u> >0/8-2/8, <u>SCa</u> tered 3/8-4/8, <u>BroKe</u> N 5/8-7/8, <u>Over</u> cast 8/8; 3-digit height in hundreds of ft; <u>Towering CU</u> mulus or <u>Cumulonim</u> Bus in <b>METAR</b> ; in <b>TAF</b> , only <u>CB</u> . <u>Vertical Vi</u> sibility for obscured sky and height "VV004". More than 1 layer may be reported or forecast. In auto-mated <b>METAR</b> reports only, <u>CLea</u> R for "clear below 12,000 feet" | <b>OVC010CB</b>    |
|                | Temperature: degrees Celsius; first 2 digits, temperature <u>"</u> / <u>"</u> last 2 digits, dew-point temperature; <u>Minus</u> for below zero, e.g., M06   | <b>18/16</b>       |
|                | Altimeter setting: indicator and 4 digits; in U.S., <u>A</u> -inches and hundredths; ( <u>Q</u> -hectoPascals, e.g., Q1013)  | <b>A2992</b>       |

# KEY to AERODROME FORECAST (TAF) and AVIATION ROUTINE WEATHER REPORT (METAR)

| Forecast             | Explanation  | Report  |
|----------------------|--|---|
| <b>WS010/31022KT</b> | In U.S. <b>TAF</b> , non-convective low-level ( $\leq 2,000$ ft) <u>Wind Shear</u> ; 3-digit height (hundreds of ft); <u>"Z"</u> ; 3-digit wind direction and 2-3 digit wind speed above the indicated height, and unit, <u>KT</u> | <b>RMK</b><br><b>SLP045</b><br><b>T01820159</b> |
| <b>FM1930</b>        | In <b>METAR</b> , <u>ReMarK</u> indicator & remarks. For example: <u>Sea-Level Pressure</u> in hectoPascals & tenths, as shown: 1004.5 hPa; <u>Temp/dew-point</u> in tenths °C, as shown: temp. 18.2°C, dew-point 15.9°C           |   |
| <b>TEMPO 2022</b>    | <u>FroM</u> and 2-digit hour and 2-digit minute <b>beginning</b> time: indicates significant change. Each FM starts on new line, indented 5 spaces.  |   |
| <b>PROB40 0407</b>   | <u>TEMPO</u> rary: changes expected for < 1 hour and in total, < half of 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period  |   |
| <b>BECMG 1315</b>    | <u>PROB</u> ability and 2-digit percent (30 or 40): probable condition during 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period   |   |
|                      | <u>BEC</u> oMinG: change expected during 2-digit hour <b>beginning</b> and 2-digit hour <b>ending</b> time period  |   |

**Table of Significant Present, Forecast and Recent Weather - Grouped in categories and used in the order listed below; or as needed in TAF, No Significant Weather.**

## QUALIFIER

### Intensity or Proximity

- Light "no sign" Moderate + Heavy

VC Vicinity: but not at aerodrome; in U.S. **METAR**, between 5 and 10SM of the point(s) of observation; in U.S. **TAF**, 5 to 10SM from center of runway complex (elsewhere within 8000m)

### Descriptor

|            |            |             |                 |
|------------|------------|-------------|-----------------|
| MI Shallow | BC Patches | PR Partial  | TS Thunderstorm |
| BL Blowing | SH Showers | DR Drifting | FZ Freezing     |

## WEATHER PHENOMENA

### Precipitation

|                 |                |         |                            |
|-----------------|----------------|---------|----------------------------|
| DZ Drizzle      | RA Rain        | SN Snow | SG Snow grains             |
| IC Ice crystals | PL Ice pellets | GR Hail | GS Small hail/snow pellets |

UP Unknown precipitation in automated observations

### Obscuration

|                          |                      |          |                    |
|--------------------------|----------------------|----------|--------------------|
| BR Mist ( $\geq 5/8$ SM) | FG Fog ( $< 5/8$ SM) | FU Smoke | VA Volcanic ash    |
| SA Sand                  | HZ Haze              | PY Spray | DU Widespread dust |

### Other

|                 |                        |              |                                    |
|-----------------|------------------------|--------------|------------------------------------|
| SQ Squall       | SS Sandstorm           | DS Duststorm | PO Well developed dust/sand whirls |
| FC Funnel cloud | +FC tornado/waterspout |              |                                    |

- Explanations in parentheses "( )" indicate different worldwide practices.
- Ceiling is not specified; defined as the lowest broken or overcast layer, or the vertical visibility.
- NWS **TAFs** exclude turbulence, icing & temperature forecasts; NWS **METARs** exclude trend fcsts
- Although not used in US, Ceiling And Visibility OK replaces visibility, weather and clouds if: visibility  $\geq 10$  km; no cloud below 5000 ft (1500 m) or below the highest minimum sector altitude, whichever is greater and no CB; and no precipitation, TS, DS, SS, MIFG, DRDU, DRSA or DRSN.

**UNITED STATES DEPARTMENT OF COMMERCE**

**NOAA/PA 96052**

**National Oceanic and Atmospheric Administration—National Weather Service**

# FAA AND NWS

## KEY AIR TRAFFIC FACILITIES

### Air Traffic Control System Command Center

Main Number.....703-904-4400

#### RGNL AIR TRAFFIC DIVISIONS

| REGION             | TELEPHONE    |
|--------------------|--------------|
| Alaskan            | 907-271-5464 |
| Central            | 816-329-2500 |
| Eastern            | 718-553-4502 |
| Great Lakes        | 847-294-7202 |
| New England        | 781-238-7500 |
| Northwest Mountain | 425-227-2500 |
| Southern           | 404-305-5500 |
| Southwest          | 817-222-5500 |
| Western Pacific    | 310-725-6500 |

#### AIR ROUTE TRAFFIC CONTROL CENTERS (ARTCCs)

| ARTCC<br>NAME  | *24 HR RGNL<br>DUTY OFFICE<br>TELEPHONE # | BUSINESS<br>HOURS   | BUSINESS<br>TELEPHONE # |
|----------------|---|---------------------|-------------------------|
| Albuquerque    | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 505-856-4300            |
| Anchorage      | 907-271-5936                              | 7:30 a.m.-4:00 p.m. | 907-269-1137            |
| Atlanta        | 404-305-5180                              | 7:30 a.m.-5:00 p.m. | 770-210-7601            |
| Boston         | 617-238-7001                              | 7:30 a.m.-4:00 p.m. | 603-879-6633            |
| Chicago        | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 630-906-8221            |
| Cleveland      | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 440-774-0310            |
| Denver         | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 303-651-4100            |
| Ft. Worth      | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 817-858-7300            |
| Houston        | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 281-230-5300            |
| Indianapolis   | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 317-247-2231            |
| Jacksonville   | 404-305-5180                              | 8:00 a.m.-4:30 p.m. | 904-549-1501            |
| Kansas City    | 816-329-3000                              | 7:30 a.m.-4:00 p.m. | 913-254-8500            |
| Los Angeles    | 661-265-8200                              | 7:30 a.m.-4:00 p.m. | 661-265-8200            |
| Memphis        | 404-305-5180                              | 7:30 a.m.-4:00 p.m. | 901-368-8103            |
| Miami          | 404-305-5180                              | 7:00 a.m.-3:30 p.m. | 305-716-1500            |
| Minneapolis    | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 651-463-5580            |
| New York       | 718-995-5426                              | 8:00 a.m.-4:40 p.m. | 516-468-1001            |
| Oakland        | 310-725-3300                              | 6:30 a.m.-3:00 p.m. | 510-745-3331            |
| Salt Lake City | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 801-320-2500            |
| Seattle        | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 253-351-3500            |
| Washington     | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 703-771-3401            |

#### MAJOR TERMINAL RADAR APPROACH CONTROLS (TRACONS)

| TRACON<br>NAME   | *24 HR RGNL<br>DUTY OFFICE<br>TELEPHONE # | BUSINESS<br>HOURS   | BUSINESS<br>TELEPHONE # |
|------------------|---|---------------------|-------------------------|
| Atlanta          | 404-305-5180                              | 7:00 a.m.-3:30 p.m. | 404-669-1200            |
| Chicago          | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 847-608-5509            |
| Dallas/Ft. Worth | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 972-615-2500            |
| Denver           | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 303-342-1500            |
| Houston          | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 281-230-8400            |
| New York         | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 516-683-2901            |
| Northern CA      | 310-725-3300                              | 7:00 a.m.-3:30 p.m. | 916-366-4001            |
| Southern CA      | 310-725-3300                              | 7:30 a.m.-4:00 p.m. | 858-537-5800            |

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.



# KEY AIR TRAFFIC FACILITIES

## DAILY NAS REPORTABLE AIRPORTS

| AIRPORT<br>NAME                                    | *24 HR RGNL<br>DUTY OFFICE<br>TELEPHONE # | BUSINESS<br>HOURS   | BUSINESS<br>TELEPHONE # |
|--|---|---------------------|-------------------------|
| Albuquerque Intl Sunport, NM                       | 817-222-5006                              | 8:00 a.m.-5:00 p.m. | 505-842-4366            |
| Andrews AFB, MD                                    | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 301-735-2380            |
| Baltimore/Washington<br>Intl Thurgood Marshall, MD | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 410-962-3555            |
| Boston Logan Intl, MA                              | 781-238-7001                              | 7:30 a.m.-4:00 p.m. | 617-455-3100            |
| Bradley Intl, CT                                   | 617-238-7001                              | 7:30 a.m.-4:00 p.m. | 203-627-3428            |
| Burbank/Bob Hope, CA                               | 310-725-3300                              | 7:00 a.m.-5:30 p.m. | 818-567-4806            |
| Charlotte Douglas Intl, NC                         | 404-305-5180                              | 8:00 a.m.-4:30 p.m. | 704-344-6487            |
| Chicago Midway, IL                                 | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 773-884-3670            |
| Chicago O'Hare Intl, IL                            | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 773-601-7600            |
| Cleveland Hopkins Intl, OH                         | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 216-898-2020            |
| Covington/Cincinnati, OH                           | 708-294-7401                              | 8:00 a.m.-4:30 p.m. | 606-767-1006            |
| Dallas/Ft. Worth Intl, TX                          | 817-222-5006                              | 8:30 a.m.-5:00 p.m. | 972-615-2531            |
| Dayton Cox Intl, OH                                | 847-294-8400                              | 7:30 a.m.-4:00 p.m. | 937-454-7300            |
| Denver Intl, CO                                    | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 303-342-1600            |
| Detroit Metro, MI                                  | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 734-955-5000            |
| Fairbanks Intl, AK                                 | 907-271-5936                              | 7:30 a.m.-4:00 p.m. | 907-474-0050            |
| Fort Lauderdale Intl, FL                           | 404-305-5180                              | 7:00 a.m.-3:30 p.m. | 305-356-7932            |
| George Bush<br>Intercontinental/Houston, TX        | 817-222-5006                              | 7:30 a.m.-4:00 p.m. | 713-230-8400            |
| Hartsfield-Jackson Atlanta Intl, GA                | 404-305-5180                              | 7:00 a.m.-3:30 p.m. | 404-669-1200            |
| Honolulu Intl, HI                                  | 310-643-3200                              | 7:30 a.m.-4:00 p.m. | 808-840-6100            |
| Houston Hobby, TX                                  | 817-222-5006                              | 8:00 a.m.-5:00 p.m. | 713-847-1400            |
| Indianapolis Intl, IN                              | 847-294-8400                              | 8:00 a.m.-4:00 p.m. | 317-484-6600            |
| Kahului/Maui, HI                                   | 310-643-3200                              | 7:30 a.m.-4:00 p.m. | 808-877-0725            |
| Kansas City Intl, MO                               | 816-329-3000                              | 7:30 a.m.-4:00 p.m. | 816-329-2700            |
| Las Vegas McCarran, NV                             | 310-725-3300                              | 7:30 a.m.-4:00 p.m. | 702-262-5978            |
| Los Angeles Intl, CA                               | 310-725-3300                              | 7:00 a.m.-3:30 p.m. | 310-342-4900            |
| Memphis Intl, TN                                   | 404-305-5180                              | 7:30 a.m.-4:00 p.m. | 901-322-3350            |
| Louis Armstrong New Orleans Intl, LA               | 817-222-5006                              | 7:00 a.m.-4:30 p.m. | 504-471-4300            |
| Miami Intl, FL                                     | 404-305-5180                              | 7:00 a.m.-4:00 p.m. | 305-869-5400            |
| Minneapolis/St. Paul, MN                           | 847-294-8400                              | 8:00 a.m.-4:00p.m.  | 612-713-4000            |
| Nashville Intl, TN                                 | 404-305-5180                              | 7:00 a.m.-3:30 p.m. | 615-781-5460            |
| New York Kennedy Intl, NY                          | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 718-656-0335            |
| New York La Guardia, NY                            | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 718-335-5461            |
| Newark Liberty Intl, NJ                            | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 973-645-3103            |
| Norman Y. Mineta San Jose Intl, CA                 | 310-643-3200                              | 7:30 a.m.-4:00 p.m. | 408-982-0750            |
| Ontario Intl, CA                                   | 310-643-3200                              | 7:30 a.m.-4:00 p.m. | 909-983-7518            |
| Orlando Intl, FL                                   | 404-305-5180                              | 7:30 a.m.-5:00 p.m. | 407-850-7000            |
| Philadelphia Intl, PA                              | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 215-492-4100            |
| Phoenix Sky Harbor Intl, AZ                        | 310-643-3200                              | 7:30 a.m.-4:00 p.m. | 602-379-4226            |
| Pittsburgh Intl, PA                                | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 412-269-9237            |
| Portland Intl, OR                                  | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 503-493-7500            |
| Raleigh-Durham, NC                                 | 404-305-5180                              | 8:00 a.m.-4:30 p.m. | 919-840-5544            |
| Ronald Reagan Washington<br>National, DC           | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 703-413-1535            |
| Salt Lake City, UT                                 | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 801-325-9600            |
| San Antonio Intl, TX                               | 817-222-5006                              | 8:00 a.m.-4:30 p.m. | 210-805-5507            |
| San Diego Lindbergh Intl, CA                       | 310-725-3300                              | 8:00 a.m.-4:30 p.m. | 619-299-0677            |
| San Francisco Intl, CA                             | 310-643-3200                              | 7:00 a.m.-3:30 p.m. | 650-876-2883            |
| San Juan Intl, PR                                  | 404-305-5180                              | 7:30 a.m.-5:00 p.m. | 809-253-8663            |
| Seattle-Tacoma Intl, WA                            | 425-227-1389                              | 7:30 a.m.-4:00 p.m. | 206-768-2900            |
| St. Louis Lambert, MO                              | 816-329-3000                              | 7:30 a.m.-4:00 p.m. | 314-890-1000            |
| Tampa Intl, FL                                     | 404-305-5180                              | 7:30 a.m.-4:00 p.m. | 813-371-7700            |
| Ted Stevens Anchorage Intl, AK                     | 907-271-5936                              | 7:30 a.m.-4:00 p.m. | 907-271-2700            |
| Teterboro, NJ                                      | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 201-288-1889            |
| Washington Dulles Intl, DC                         | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 703-661-6031            |
| West Palm Beach, FL                                | 404-305-5180                              | 8:00 a.m.-4:30 p.m. | 407-683-1867            |
| Westchester Co, NY                                 | 718-995-5426                              | 8:00 a.m.-4:30 p.m. | 914-948-6520            |

\*Facilities can be contacted through the Rgnl Duty Officer during non-business hours.

Air Route Traffic Control Center frequencies and their remotest transmitter sites are listed below for the coverage of this volume. Bold face type indicates high altitude frequencies, light face type indicates low altitude frequencies. To insure unrestricted IFR operations within the high altitude enroute sectors, the use of 720 channel communications equipment (25 kHz channel spacing) is required.

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**®CHICAGO CENTER** 127.8 125.2

**H-2-5-10-12, L-12-27-28-31, A-1**  
**(KZAU)**

**Aurora** – 123.75  
**Burlington** – 135.6  
**Chicago Heights** – 132.95  
**Crown Point** – 127.8  
**Danville** – 135.75  
**Des Plaines** – 133.2 128.65 120.35  
**Downers Grove** – 135.75 127.6  
**Dubuque** – **127.775** 133.95 **125.225**  
**Ft. Wayne** – **126.325** 119.85  
**Goshen** – 133.9 135.9 127.55  
**Grand Rapids** – **126.125** 128.4  
**Hampshire** – 134.2 133.35  
**Horicon** – 135.55 **132.75** **132.225**  
**Jones** – **125.975** **120.225**  
**Kankakee** – 132.5 120.125 **118.225**  
**Lafayette** – 123.85  
**Leroy** – 119.225  
**Lone Rock** – 133.3  
**Maple Park** – 127.075  
**Milford** – **135.4** **132.5** 127.45 125.05 120.175  
**Milwaukee** – 134.75 132.3 125.1  
**Moline** – **135.825** 118.75  
**Monroe** – **133.425**  
**Muskegon** – **132.27**  
**Oshkosh** – 132.1  
**Pullman** – 128.5  
**Rockford** – **120.375**  
**Rossville** 125.375 **120.975**  
**South Bend** – **135.35**  
**Volk Fld** 125.05

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**®CLEVELAND CENTER**
**H-2-5-10-11, L-27-28-29-30-31-32, A-2**  
**(KZOB)**

**Algonac** – **134.775** 132.25 **126.525**  
**Belmont** – **135.175** **124.425** 120.4  
**Carleton** – **134.775** 119.95  
**Chardon** – 120.775  
**Detroit (North)** – **120.075**  
**Findlay** – 135.1 **127.675**  
**Flint** – 127.7 126.75  
**Holland** – **135.775** **121.175**  
**Jackson** – 134.65 127.3  
**Litchfield** – **135.725** 134.65 120.45  
**Mansfield** – 134.9 **133.375**  
**Mt Hope** – 120.6  
**Paris** – 128.15 120.6  
**Saginaw** – **133.525** 127.7  
**Sandusky** – 132.45 127.9 **119.875** **119.325**  
**Waterville** – 128.625

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**® INDIANAPOLIS CENTER – 133.425 132.775 128.375**

H-5-9-10-12, L-16-25-26-27-29

(KZID)

125.55 124.525 119.55

Brookville – 135.8 135.125 **120.575**Evansville – **132.525** 128.3Henryville – **134.275 133.05** 124.775London – 134.0 **128.775** 126.57 124.8 120.475

Marietta – 125.55

Merwyn – 135.575 **134.7** 123.925

Muncie – 120.65

New Hope – 124.625 121.175

Portsmouth – 135.575 124.225 **120.275**

Rosewood – 128.075

Terre Haute – **134.175** 132.2Winchester – **128.22** 126.375 **123.775**Zanesville – **133.775 132.825** 125.075 124.45**® KANSAS CITY CENTER – 135.3**

H-5-6, L-10-15-16-27, A-2

(KZKC)

Decatur – 132.1 124.3

Effingham – **135.05 133.225** 124.3Kirksville – **134.625** 132.6

Marion – 125.3

Mt Vernon – **132.875** 127.7

Quincy – 135.525

St Charles – 125.9 121.25

St Louis – 128.1 **127.225** 125.5Vandalia – **125.725****® MINNEAPOLIS CENTER**

H-2-5-10-11, L-10-12-13-14-27-28-31

(KZMP)

Central Wisconsin – 124.4

Duluth – **134.675 134.55** 134.55 127.9Eau Claire – **133.75** 125.3

Escanaba – 127.65

Farmington – 133.7

Flying Cloud – 133.7 121.05

Green Bay – 125.55

Hayward – 126.45

Houghton – 127.2

Iron Mountain – **133.45** 121.25

Ironwood – 133.55

La Crosse – 128.6 118.85

Mosinee – 124.4

Pellston – 134.6 **132.425**

Princeton – 121.05

Rhinelander – **123.725** 133.65

Rochester – 132.35

Saginaw – 118.05

Sawyer – 119.1

Swinns Valley – **135.7** 134.85

Traverse City – 132.9

White Cloud – **132.55** 120.85

VHF frequencies available at Flight Service Stations and at their remote communication outlets (RCO's) are listed below for the coverage of this volume. Frequencies in bold type are available all altitudes but recommended for use FL180 and above. "T" indicates transmit only and "R" indicates receive only. RCO's available at NAVAIDS are listed after the NAVAID name. RCO's not at NAVAID's are listed by name.

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**CLEVELAND AFSS**

AKRON VOR/DME 114.4T 122.1R  
BELLAIRE VOR/DME 117.1T 122.1R  
BRIGGS VOR/DME 112.4T 122.1R  
CHARDON VOR/DME 112.7T 122.1R  
CLEVELAND RCO 122.1R 122.2 **122.35**  
DRYER VOR/DME 113.6T 122.1R  
FINDLAY VORTAC 108.2T 122.1R 122.2 **122.65**  
JEFFERSON VOR/DME 115.2T 122.1R  
MANSFIELD VORTAC 108.8T 122.1R **122.6**  
NEWCOMERSTOWN VOR/DME 111.8T 122.1R  
SANDUSKY VOR/DME 109.2T 122.1R  
WATERVILLE VOR/DME 113.1T 122.1R  
YOUNGSTOWN VORTAC 109.0T 122.1R 122.2  
ZANESVILLE VOR/DME 111.4T 122.1R 122.2 **122.5**

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**DAYTON AFSS**

ALLEN COUNTY VOR 108.4T 122.1R  
ATHENS-ALBANY RCO 122.25  
APPLETON VORTAC 116.7T 122.1R  
CINCINNATI RCO **122.4**  
COLUMBUS RCO 122.2 **122.3**  
DAYTON RCO 114.5T 122.1R 122.2 **122.55**  
DAYTON VOR/DME 114.5T 122.1R  
GALLIPOLIS RCO 121.65  
HILLSBORO RCO 122.2  
ROSEWOOD VORTAC 117.5T 122.1R  
YELLOW BUD VOR 112.5T 122.1R

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**GREEN BAY AFSS**

ASHLAND RCO 122.25  
BLACK RIVER FALLS RCO 122.5  
CHIPPEWA RCO 123.65  
DELLS VORTAC 117.0T 122.1R  
EAU CLAIRE RCO 122.65 123.6  
ESCANABA RCO 122.3  
FALLS VOR/DME 110.0T 122.1R  
FOND DU LAC RCO 122.5  
GREEN BAY RCO 122.2 122.55  
HANCOCK RCO **122.525** 123.65  
HAYWARD VOR/DME 113.4T 122.1R  
IRON MOUNTAIN VOR/DME 111.2T 122.1R  
IRONWOOD RCO 122.3  
JANESVILLE VOR/DME 114.3T 122.1R  
KENOSHA VOR/DME 109.2T 123.6R  
LA CROSSE RCO 122.2 122.35  
LONE ROCK RCO 122.35  
MACKINAC ISLAND RCO 122.35  
MADISON RCO 122.6  
MARSHFIELD RCO 122.55  
MANITOWOC VOR/DME 111.0T 122.1R  
MENOMINEE VOR/DME 109.6T 122.1R  
MILWAUKEE RCO 122.4 122.65  
MOSINEE RCO **122.525**  
NEWBERRY RCO 122.4  
OSHKOSH VORTAC 111.8T 122.1R 122.25  
PHILLIPS RCO 122.05  
PLATTEVILLE RCO 122.5  
PRAIRIE DU CHIEN RCO 122.25  
RHINELANDER VORTAC 109.2T 122.1R  
RICE LAKE RCO 122.3  
SAULT STE MARIE VOR/DME 112.2T 122.1R  
SAWYER RCO 123.6  
SCHOOLCRAFT COUNTY RCO 122.25  
SIREN VOR/DME 109.4T 122.1R  
STEVENS POINT VORTAC 110.6T 122.1R  
TIMMERMAN VOR/DME 112.5T 123.6R  
WAUSAU RCO 122.4  
WEST BEND VOR 109.8T 122.1R  
WISCONSIN RAPIDS RCO 122.45  
WOODRUFF RCO 122.6

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**KANKAKEE AFSS**

BLOOMINGTON VOR/DME 108.2T 123.6R  
BRADFORD VORTAC 114.7T 122.05R 123.6  
CHICAGO HEIGHTS VORTAC 114.2T 122.1R  
CHICAGO MEIGS RCO **122.15**  
DUPAGE VOR/DME 108.4T 122.1R 122.3  
GALESBURG VOR/DME 109.8T 122.1R  
JOLIET VORTAC 112.3T 122.1R 122.5  
KANKAKEE VOR/DME 111.6T 122.1R 122.2  
MACOMB RCO **122.15**  
MOLINE RCO **122.6**  
NEW LENOX RCO 122.5  
PEORIA RCO 122.35  
PEOTONE VORTAC 113.2T 122.05R  
POLO VOR/DME 111.2T 122.1R  
PONTIAC VOR/DME 109.6T 122.1R  
ROCKFORD VOR/DME 110.8T 122.1R 122.65  
WAUKEGAN RCO 122.55

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**LANSING AFSS**

ALPENA VORTAC 108.8T 122.1R  
 BAD AXE RCO 122.65  
 BATTLE CREEK RCO 122.2  
 BARRIEN SPRINGS RCO 121.625  
 CARLETON VORTAC 115.7T 122.1R  
 DETROIT RCO 122.2 **122.55**  
 FLINT RCO 122.3  
 GAYLORD RCO 122.55  
 GRAND RAPIDS VOR/DME 115.95T 122.1R  
 JACKSON RCO 122.2  
 KALAMAZOO VOR/DME 109.0T 122.1R  
 KEELER VOR/DME 116.6T 122.1R  
 LANSING RCO 122.2  
 LITCHFIELD VOR/DME 111.2T 122.1R  
 LUDINGTON RCO 122.45  
 MANISTEE VOR/DME 111.4T 122.1R  
 MOUNT PLEASANT RCO 122.6  
 MUSKEGON RCO 122.5  
 PECK VORTAC 114.0T 122.1R  
 PELLSTON RCO 122.2 122.3 123.6  
 PONTIAC VORTAC 111.0T 122.15R  
 PULLMAN VOR/DME 112.1T 122.1R  
 SAGINAW RCO 122.2 122.4  
 SALEM VORTAC 114.3T 122.1R  
 TRAVERSE CITY RCO 122.2 **122.65**  
 WEST BRANCH RCO 122.35  
 WHITE CLOUD VORTAC 117.6T 122.1R

**SAINT LOUIS AFSS** 122.2 122.45

BIBLE GROVE VORTAC 109.0T 122.05R  
 CENTRALIA VORTAC 115.0T 122.1R  
 CHAMPAIGN VORTAC 110.0T 122.1R 122.45  
 DANVILLE VORTAC 111.0T 122.1R  
 DECATUR VORTAC 117.2T 122.1R 122.3  
 MARION VOR/DME 110.4T 122.1R  
 MATTOON VOR/DME 109.4T 123.6R  
 MOUNT VERNON VOR/DME 113.8T 122.05R  
 QUINCY VORTAC 113.6T 122.1R 122.5  
 ROBERTS VOR/DME 116.8T 122.1R  
 SAINT LOUIS REGIONAL RCO 122.05  
 SAMSVILLE VOR/DME 116.6T 122.1R  
 SPINNER VORTAC 112.7T 122.25  
 VANDALIA VORTAC 114.3T 122.1R

**TERRE HAUTE AFSS**

CROWNPOINT RCO 123.65  
 EVANSVILLE RCO 122.65  
 FORT WAYNE RCO 122.2 122.45  
 GOSHEN VORTAC 113.7T 122.1R  
 HOOSIER VORTAC 110.2T 122.1R  
 INDIANAPOLIS RCO 122.55  
 KNOX VOR/DME 115.6T 122.1R  
 KOKOMO VORTAC 113.5T 122.1R  
 LAFAYETTE RCO 122.2 122.35  
 MUNCIE VOR/DME 114.4T 122.1R  
 NABB VORTAC 112.4T 122.1R  
 OSGOOD RCO 122.25  
 RICHMOND VORTAC 110.6T 122.1R  
 SHELBYVILLE VORTAC 112.0T 122.1R  
 SOUTH BEND RCO 122.6  
 TERRE HAUTE RCO **122.65**  
 WASHINGTON RCO 122.2

**FLIGHT STANDARDS DISTRICT OFFICES (FSDO)**

Below is a list of FSDO's in the area of coverage of this directory. These offices serve the aviation industry and the general public on matters relating to certification and operation of general aviation aircraft. Address letters to Manager, Flight Standards District Office—Federal Aviation Administration.

**ILLINOIS**

DuPage Airport  
31W775 North Avenue  
West Chicago, Illinois 60185-1056  
Telephone: 630-443-3100

Capital Airport  
1250 North Airport Drive, Suite 1  
Springfield, Illinois 62707-8417  
Telephone: 217-744-1910

9950 West Lawrence Ave., Suite 400  
Schiller Park, Illinois 60176  
Telephone: 847-928-8000

**INDIANA**

8303 W. Southern Avenue  
Indianapolis, Indiana 46241  
Telephone: 317-487-2400

1843 Commerce Drive, Suite 200  
South Bend, Indiana 46628  
Telephone: 219-245-4600

**MICHIGAN**

3196 Kraft Ave. SE, Suite 103  
Grand Rapids, Michigan 49512  
Telephone: 616-954-6657

Willow Run Airport  
8800 Beck Road  
Belleville, Michigan 48111  
Telephone: 734-487-7222

**OHIO**

Great Northern Technology Park II  
25249 Country Club Blvd.  
North Olmsted, Ohio 44070  
Telephone: 440-686-2001

Lunken Airport Executive Building  
Ground Floor  
4242 Airport Road  
Cincinnati, Ohio 45226  
Telephone: 513-979-6400

Port Columbus International Airport  
2780 Airport Drive, Suite 300  
Columbus, Ohio 43219  
Telephone: 614-255-3120

**WISCONSIN**

General Mitchell Intl Airport  
4915 S. Howell Ave.  
Milwaukee, Wisconsin 53207  
Telephone: 414-486-2920

## ROUTES

### PREFERRED IFR ROUTES

A system of preferred routes has been established to guide pilots in planning their route of flight, to minimize route changes during the operational phase of flight, and to aid in the efficient orderly management of the air traffic using federal airways. The preferred IFR routes which follow are designed to serve the needs of airspace users and to provide for a systematic flow of air traffic in the major terminal and en route flight environments. Cooperation by all pilots in filing preferred routes will result in fewer traffic delays and will better provide for efficient departure, en route and arrival air traffic service.

The following lists contain preferred IFR routes for the low altitude stratum and the high altitude stratum. The high altitude list is in two sections; the first section showing terminal to terminal routes and the second section showing single direction route segments. Also, on some high altitude routes low altitude airways are included as transition routes.

The following will explain the terms/abbreviations used in the listing:

1. Preferred routes beginning/ending with an airway number indicate that the airway essentially overlies the airport and flight are normally cleared directly on the airway.

2. Preferred IFR routes beginning/ending with a fix indicate that aircraft may be routed to/from these fixes via a Standard Instrument Departure (SID) route, radar vectors (RV), or a Standard Terminal Arrival Route (STAR).

3. Preferred IFR routes for major terminals selected are listed alphabetically under the name of the departure airport. Where several airports are in proximity they are listed under the principal airport and categorized as a metropolitan area; e.g., New York Metro Area.

4. Preferred IFR routes used in one direction only for selected segments, irrespective of point of departure or destination, are listed numerically showing the segment fixes and the direction and times effective.

5. Where more than one route is listed the routes have equal priority for use.

6. Official location identifiers are used in the route description for VOR/VORTAC nav aids.

7. Intersection names are spelled out.

8. Navaid radial and distance fixes (e.g., ARD20113) have been used in the route description in an expediency and intersection names will be assigned as soon as routine processing can be accomplished. Navaid radial (no distance stated) may be used to describe a route to intercept a specified airway (e.g., MIV MIV101 V39); another navaid radial (e.g., UIM UIM255 GSW031); or an intersection (e.g., GSW081 FITCH).

9. Where two nav aids, an intersection and a navaid, a navaid and a navaid radial and distance point, or any navigable combination of these route descriptions follow in succession, the route is direct.

10. The effective times for the routes are in UTC. During periods of daylight saving time effective times will be one hour earlier than indicated. All states observe daylight saving time except Arizona, Puerto Rico and the Virgin Islands. Pilots planning flight between the terminals or route segments listed should file for the appropriate preferred IFR route.

11. (90–170 incl) altitude flight level assignment in hundred of feet.

12. The notations "pressurized" and "unpressurized" for certain low altitude preferred routes to Kennedy Airport indicate the preferred route based on aircraft performance.

13. High Altitude Preferred IFR Routes are in effect during the following time periods unless otherwise noted.

|                    |                       |
|--------------------|-----------------------|
| Sun .....          | 1300–2259 local time. |
| Mon thru Fri ..... | 0701–2259 local time. |
| Sat .....          | 0701–1459 local time. |

14. Use current SIDs and STARs for flight planning.

15. For high altitude routes, the portion of the routes contained in brackets [ ] is suggested but optional. The portion of the route outside the brackets will likely be required by the facilities involved.

### LOW ALTITUDE

| Terminals                         | Route                                      | Effective Times (UTC) |
|-----------------------------------|--|-----------------------|
| <b>CHICAGO METRO AREA</b>         |  |                       |
| From Midway (MDW) or O'Hare (ORD) |  |                       |
| Atlanta (ATL) .....               | EON V171 TTH V243 GQO V333 DALAS ATL ..... |                       |
| Denver (DEN) .....                | SIMMN V172 OBH V219 HCT V8 DVV .....       |                       |
| Indianapolis (IND) .....          | EON V399 KENLA V128 JELLS .....            |                       |
| Louisville (LOU) .....            | EON V171 TTH V243 IUU279 CHERI .....       | 1100–0300             |
| Memphis (MEM) .....               | RBS V429 MWA V67 CNG V11 MIOLA .....       | 1600–2300             |
| Miami (MIA) .....                 | EON V171 TTH V243 LGC V321 PZD V159 CTY V7 |                       |
|                                   | LAL V157 LBV V529 V35 CURVE .....          | 1100–0300             |
| Pittsburgh (PIT) .....            | GIJ V6 DJB V30 ACO V337 CUTTA .....        | 1100–0300             |
| San Francisco (SFO) .....         | SIMMN V172 PLL V158 DBQ V100 MBW V6 FMG    |                       |
|                                   | V6 .....                                   |                       |
| Tampa (TPA) .....                 | EON V171 TTH V243 LGC V321 PZD V159 CTY    |                       |
|                                   | V35 ENDED .....                            |                       |
|                                   | or   |                       |
|                                   | (GPS or DME/DME-IRU Equipped) EON V171 TTH |                       |
|                                   | V243 LGC V321 PZD V159 CTY V35 ENDED ..... |                       |



| Terminals   | Route   | Effective Times (UTC) |
|---|---|-----------------------|
| Tulsa (TUL) .....                                     | MZV BRL V63 SGF V14 .....                       | 0000-2359             |
| Washington Natl (DCA) .....                           | EON V144 ESL V4 MANNE .....                     | 1100-0300             |
| <b>From Midway (MDW) only</b>                         |   |                       |
| Des Moines (DSM) .....                                | SIMMN V172 TNU .....                            | 1100-0300             |
| Detroit Metro-Wayne Co. (DTW) .....                   | GIJ V10 LFD MIZAR-STAR .....                    |                       |
| Detroit Satellites:                                   |   |                       |
| Ann Arbor (ARB) .....                                 |   |                       |
| Pontiac (PTK) .....                                   |   |                       |
| Willow Run (YIP) .....                                | GIJ V10 LFD CRUX-STAR .....                     |                       |
| Windsor (YQG) .....                                   |   |                       |
| Young (DET) .....                                     | GIJ ELX V218 LAN SPRTN-STAR .....               |                       |
| Kansas City (MKC) .....                               | MZV BRL V10 IRK BQS-STAR .....                  | 1100-0300             |
| Omaha (OMA) .....                                     | SIMMN V172 OVR .....                            | 0000-2359             |
| <b>From O'Hare (ORD) only</b>                         |   |                       |
| Cleveland (CLE) .....                                 | GIJ V6 VWV WAKEM-STAR .....                     | 1100-0300             |
| Des Moines (DSM) .....                                | SIMMN V172 TNU .....                            | 0000-2359             |
| Detroit Metro-Wayne Co (DTW) .....                    | PETTY MKG POLAR-STAR .....                      |                       |
| Detroit Satellites:                                   |   |                       |
| Ann Arbor (ARB) .....                                 |   |                       |
| Pontiac (PTK) .....                                   |   |                       |
| Willow Run (YIP) .....                                |   |                       |
| Windsor (YQG) .....                                   |   |                       |
| Young (DET) .....                                     | MUSKY V100 ELX V218 LAN SPRTN-STAR .....        |                       |
| Kansas City (MKC) .....                               | MZV BRL V10 IRK BQS-STAR .....                  |                       |
| Memphis (MEM) .....                                   | RBS V429 MWA V67 CNG V11 MIOLA .....            | 0000-2359             |
| Muskegon (MKG) .....                                  | PETTY V216 .....                                |                       |
| Omaha (OMA) .....                                     | SIMMN V172 OVR .....                            | 0000-2359             |
| Saginaw (MBS) .....                                   | PETTY MKG V216 .....                            |                       |
| <b>From O'Hare (ORD) and North Satellite Airports</b> |   |                       |
| Detroit Metro-Wayne Co. (DTW) .....                   | (150-230 incl) PETTY MKG POLAR-STAR .....       | 1100-0300             |
| <b>CINCINNATI METRO AREA (CVG, LUK)</b>               |   |                       |
| Detroit/Wayne (DTW) .....                             | DQN MIZAR-STAR .....                            | 1100-0300             |
| Detroit Satellites:                                   |   |                       |
| Ann Arbor (ARB) .....                                 | DQN CRUX-STAR .....                             | 1100-0300             |
| Pontiac (PTK) .....                                   |   |                       |
| Willow Run (YIP) .....                                | DQN CRUX-STAR .....                             |                       |
| Windsor (YQG) .....                                   |   |                       |
| Young (DET) .....                                     | V275 KLINE VWV VWV064 LYNTN .....               |                       |
| <b>From COVINGTON (CVG) only</b>                      |   |                       |
| Atlanta (ATL) .....                                   | V97 VXV V267 HRS V463 WOMAC .....               | 1100-0300             |
| Chicago Midway (MDW) .....                            | V128 VHP BVT V97 CGT .....                      | 1100-0300             |
| Chicago O'Hare (ORD) .....                            | V128 VHP BVT V97 CGT V7 BEBEE .....             | 1100-0300             |
| Indianapolis (IND) .....                              | V128 VHP .....                                  | 1100-0300             |
| Knoxville (TYS) .....                                 | HYK V97 .....                                   |                       |
| Louisville (SDF) .....                                | CVG206 IIU055 IIU .....                         | 1100-0300             |
| Pittsburgh (PIT) .....                                | (60-170 incl) V128 YRK V44 JPU V117 WISKE       |                       |
|   | WISKE-STAR .....                                | 1100-0300             |
| <b>CLEVELAND METRO AREA (CLE, CGF, BKL, LNN, LPR)</b> |   |                       |
| Baltimore (BWI) .....                                 | (90-170 incl) ACO AIR V75 MGW V44 MRB V3        |                       |
|   | EMI .....                                       | 1100-0300             |
| Boston (BOS) .....                                    | (60-170 incl) V522 ERI V270 CFB V72             |                       |
|   | ALB V2 GDM GDM-STAR .....                       | 1100-0300             |
| Buffalo (BUF) .....                                   | (60-170 incl) V522 ERI V43 WELLA .....          |                       |
| Chicago Midway (MDW) .....                            | (60-170 incl) SKY VWV V126 CGT .....            | 1100-0300             |
| Chicago O'Hare (ORD) .....                            | (60-170 incl) V45 VWV V126 HALIE V340           |                       |
|   | BEARZ .....                                     | 1100-0300             |
| Columbus (CMH) .....                                  | (60-170 incl) DJB DJB173 HERAK APE035           |                       |
|   | APE .....                                       |                       |
| Dayton (DAY) .....                                    | (60-170 incl) OBRLN-DP ROD .....                |                       |
| Detroit/Wayne (DTW) .....                             | (60-170 incl) DJB DJB314 GEMNI GEMNI-STAR ..... |                       |
| Detroit Satellites:                                   |   |                       |
| Ann Arbor (ARB) .....                                 |   |                       |
| Pontiac (PTK) .....                                   |   |                       |

| Terminals  | Route  | Effective Times (UTC) |
|--|--|-----------------------|
| Willow Run (YIP) .....                           | (60–170 incl) DJB LLEE0-STAR .....             | 1100-0300             |
| Windsor (YQG) .....                              | (60–170 incl) OBRLN-DP MIE MIE244 CLANG        |                       |
| Young (DET) .....                                | CLANG-STAR .....                               |                       |
| Indianapolis (IND) .....                         | (60–170 incl) ACO V337 CUTTA .....             | 1100-0300             |
| Pittsburgh (PIT) .....                           | (60–170 incl) V522 ERI V14 BUF V2 CLUNG .....  | 1100-0300             |
| Rochester (ROC) .....                            | (90–170 incl) ACO AIR V75 MGW V144 ESL V4      |                       |
| Washington Dulles (IAD) .....                    | AML .....                                      | 1100-0300             |
|  | or   |                       |
|  | (90–170 incl) ACO AIR V75 MGW V44 MRB AML ..   | 1100-0300             |
| Washington Natl (DCA) .....                      | (90–170 incl) ACO AIR V75 MGW V144 ESL V4      |                       |
|  | AML .....                                      | 1100-0300             |
| <b>COLUMBUS (CMH)</b>                            |  |                       |
| Cleveland (CLE) .....                            | (60–170 incl) V43 TVT KEATN-STAR .....         | 1100-0300             |
| Pittsburgh (PIT) .....                           | (60–170 incl) APE V12 CTW WISKE-STAR .....     | 1100-0300             |
| Toledo (TOL) .....                               | V493 VWV .....                                 | 1100-0300             |
| <b>DAYTON (DAY)</b>                              |  |                       |
| Chicago Midway (MDW) .....                       | V55 V422 CGT .....                             | 1100-0300             |
| Chicago O'Hare (ORD) .....                       | V55 FWA V340 BEARZ .....                       | 1100-0300             |
| Cleveland (CLE) .....                            | DQN ABERZ-STAR .....                           | 1100-0300             |
| Detroit Metro-Wayne Co (DTW) .....               | DQN MIZAR-STAR .....                           | 1100-0300             |
| <b>Detroit Satellites:</b>                       |  |                       |
| Ann Arbor (ARB) .....                            |  |                       |
| Pontiac (PTK) .....                              |  |                       |
| Willow Run (YIP) .....                           | DQN CRUX-STAR .....                            |                       |
| Windsor (YQG) .....                              |  |                       |
| Young (DET) .....                                | V275 KLINE VWV VWV064 LYNTN .....              |                       |
| Washington Dulles (IAD) .....                    | (90–170 incl) ZZV V144 ESL V4 AML .....        | 1100-0300             |
|  | or   |                       |
|  | (90–170 incl) ZZV V14 MGW V44 MRB AML .....    | 1100-0300             |
| Washington Natl (DCA) .....                      | (90–170 incl) ZZV V144 ESL V4 AML .....        | 1100-0300             |
| <b>DETROIT METRO AREA</b>                        |  |                       |
| <b>(Detroit Metro-Wayne Co &amp; Satellites)</b> |  |                       |
| Albany (ALB) .....                               | (60–170 incl) TYCOB V116 BFD V72 .....         | 1100-0300             |
| Atlantic City (ACY) .....                        | (60–170 incl) ERRTH-DP CXR YNG V6 SEG V170     |                       |
|  | MXE V184 .....                                 | 1100-0300             |
| Boston (BOS) .....                               | (60–170 incl) TYCOB V116 BFD V72 ALB V2        |                       |
|  | GDM .....                                      | 1100-0300             |
| Buffalo (BUF) .....                              | (60–170 incl) TYCOB V90 DKK .....              | 1100-0300             |
| Chicago Midway (MDW) .....                       | HARWL JXN V116 LEROY GSH CGT .....             | 1100-0300             |
| Chicago O'Hare (ORD) .....                       | FWA-DP FWA KNOX-STAR .....                     |                       |
|  | or   |                       |
|  | FWA-DP FWA WATSON (RNAV)-STAR .....            |                       |
|  | or   |                       |
|  | HARWL JXN V116 ELX V100 DEERE .....            |                       |
|  | or   |                       |
|  | GRR MKG V510 FAH BJB OBK .....                 |                       |
| Cleveland (CLE) .....                            | MAARS ACO319 HIMEZ HIMEZ-STAR .....            |                       |
| Columbus (CMH) .....                             | CAVVS VWV FDY V279 GUNNE .....                 | 1100-0300             |
| Fort Wayne (FWA) .....                           | (60–170 incl, Props) HARWL JXN V221 .....      | 1100-0300             |
|  | or   |                       |
|  | (60–170 incl, Jets) ANNTS DXO217 FWA071 .....  | 1100-0300             |
| Indianapolis (IND) .....                         | HARWL JXN V221 MIE V14 CLANG-STAR .....        | 1100-0300             |
| Milwaukee (MKE) .....                            | (60–170 incl) DUNKS V170 PMM V170 PETTY .....  | 1100-0300             |
| Montreal (CYUL) .....                            | (60–170 incl) TYCOB V116 ERI V270 ELZ V501     |                       |
|  | SYR MSS V203 FRANX FRANX-STAR .....            | 1100-0300             |
| Pittsburgh (PIT) .....                           | (60–170 incl) ACO CUTTA-STAR .....             | 1100-0300             |
| Rochester (ROC) .....                            | (60–170 incl) TYCOB YQG 098 SURLY DKK V14      |                       |
|  | BUF .....                                      | 1100-0300             |
| Syracuse (SYR) .....                             | (60–170 incl) TYCOB V116 ERI V14 GEE V84 ..... | 1100-0300             |
| Washington Natl (DCA) .....                      | (60–170 incl) ACO AIR V75 MGW V144 ESL V4      |                       |
|  | MANNE .....                                    | 1100-0300             |
| Westchester Co (HPN) .....                       | (60–170 incl) TYCOB V116 ERI V270 V433 V157    |                       |
|  | HAARP .....                                    | 1100-0300             |
|  | or   |                       |

| Terminals   | Route   | Effective Times (UTC) |
|---|---|-----------------------|
|   | (60–170 incl, props less than 250 kts) TYCOB<br>V116 ERI V270 V433 V123 HAARP ..... | 1100–0300             |
| <b>FORT WAYNE (FWA)</b>                                     |   |                       |
| Moline (MLI) .....  | V144 BDF V156 MZV .....   | 0000–2359             |
| Rockford (RFD) .....  | V144 SMARS V128 .....   | 0000–2359             |
| <b>GREATER PEORIA RGNL (PIA)</b>                            |   |                       |
| Chicago Midway (MDW) .....                                  | PIA PIA056 MOTIF JOT .....  |                       |
| Chicago O'Hare (ORD) .....                                  | PIA PIA035 V10 PLANO .....  |                       |
| <b>INDIANAPOLIS (IND)</b>                                   |   |                       |
| Cleveland Metro Area (CLE) (CGF) (BKL)<br>(LNN) (LPR) ..... | (RNAV only/60–170 incl) DQN T000K MFD<br>ABERZ ABERZ–STAR .....                     |                       |
|   | or<br>(all others/60–170 incl) DQN MFD MFD048<br>ABERZ ABERZ–STAR .....             |                       |
| Detroit Metro–Wayne Co (DTW) .....                          | FWA MIZAR–STAR .....  |                       |
|   | FWA CRUX–STAR .....   |                       |
| Detroit Satellites:   |   |                       |
| Ann Arbor (ARB) .....                                       |   |                       |
| Pontiac (PTK) .....   |   |                       |
| Willow Run (YIP) .....                                      | FWA CRUX–STAR .....   |                       |
| Windsor (YQG) .....   |   |                       |
| Young (DET) .....   | V275 KLINE VWV VWV051 POOFE .....   |                       |
| Evansville (EVV) .....                                      | V305 .....  |                       |
| Kansas City (MCK) .....                                     | V50 SPI BQS–STAR .....  | 0000–2359             |
| Pittsburgh (PIT) .....                                      | (60–170 incl) V50 DQN V12 CTW WISKE–STAR .....                                      | 1100–0300             |
| Springfield (SGF) .....                                     | V11 PXV V190 .....  | 0000–2359             |
|   | or<br>TTH BIB V72 FAM V190 .....  | 0000–2359             |
| Tulsa (TUL) .....   | V11 PXV V190 SGF V14 .....  | 0000–2359             |
| Wichita (ICT) .....   | TTH BIB V72 ENL V234 EMP V12 .....  | 0000–2359             |
| <b>MILWAUKEE (MKE)</b>                                      |   |                       |
| Detroit Metro–Wayne Co (DTW) .....                          | (60–170 incl) SQUIB MKG POLAR–STAR .....  |                       |
| Detroit Satellites:   |   |                       |
| Ann Arbor (ARB) .....                                       |   |                       |
| Pontiac (PTK) .....   |   |                       |
| Willow Run (YIP) .....                                      |   |                       |
| Windsor (YQG) .....   |   |                       |
| Young (DET) .....   | GRR LAN SPRTN–STAR .....  |                       |
| <b>MOLINE (MLI)</b>   |   |                       |
| Fort Wayne (FWA) .....                                      | V156 BDF V144 .....   | 0000–2359             |
| South Bend (SBN) .....                                      | V156 BDF V144 MAPPS V156 .....  | 0000–2359             |
| <b>ROCKFORD (RFD)</b>                                       |   |                       |
| Fort Wayne (FWA) .....                                      | V128 SMARS V144 .....   | 0000–2359             |
| South Bend (SBN) .....                                      | V128 SMARS V144 MAPPS V156 .....  | 0000–2359             |
| <b>SOUTH BEND (SBN)</b>                                     |   |                       |
| Moline (MLI) .....  | V156 MAPPS V144 BDF V156 MZV .....  | 0000–2359             |
| Rockford (RFD) .....  | V156 MAPPS V144 SMARS V128 .....  | 0000–2359             |
| <b>SPRINGFIELD (SPI)</b>                                    |   |                       |
| Chicago Midway (MDW) .....                                  | PNT MOTIF–STAR .....  | 0000–2359             |
| Chicago O'Hare (ORD) .....                                  | PNT V227 PLANO .....  | 0000–2359             |
| Springfield (SGF) .....                                     | V50 UIN V63 SGF V14 .....   | 0000–2359             |
| Tulsa (TUL) .....   | V50 UIN V63 SGF V14 .....   | 0000–2359             |
| <b>TERRE HAUTE (HUF)</b>                                    |   |                       |
| Kansas City (MCK) .....                                     | V50 SPI BQS–STAR .....  | 0000–2359             |
| Springfield (SGF) .....                                     | V7 PXV V190 .....   | 0000–2359             |
| Tulsa (TUL) .....   | V7 PXV V190 SGF V14 .....   | 0000–2359             |

## SPECIAL LOW ALTITUDE DIRECTIONAL ROUTES

| Route   | Effective Times (UTC)         |
|---|-------------------------------|
| Low Altitude IFR single–direction route for traffic overflying ZOB ARTCC landing at ORD:<br>Westbound ..... | JXN V116 ELX V100 DEERE ..... |
| Low Altitude IFR single–direction route for traffic overflying ZOB ARTCC landing at ORD:<br>Westbound ..... | OXI KNOX–STAR .....           |

## HIGH ALTITUDE

Effective  
Times  
(UTC)

## Terminals

## Route

## AKRON (CAK)

Detroit/Wayne (DTW)..... DJB DJB314 GEMNI GEMNI-STAR .....

## CHICAGO METRO AREA (ORD, MDW)

Atlanta (ATL)..... (RNAV only) GUIDO J73 PXV BNA ERLIN  
(RNAV)-STAR .....

or

(all others) GUIDO J73 PXV BNA ROME-STAR.....

Baltimore (BWI) ..... GIJ J146 J34 DJB J162 MGW EMI-STAR .....

Birmingham (BHM) ..... EON DNB BNA VUZ .....

Boca Raton (BCT) ..... (GPS or DME/DME-IRU equipped) EON DNV TTH  
SWAPP ATL J89 OTK PRRIE (RNAV)-STAR .....

Boston (BOS) ..... ELX CRL J554 JHW J82 ALB GDM GDM-STAR .....

Bristol/Johnson/Kingsport (TRI) ..... EON DNV VHP J24 FLM HMV .....

Charleston (CHS) ..... EON DNV VHP J24 FLM .....

Charleston (CRW)..... EON DNV VHP J24 FLM HVQ .....

Charlotte (CLT) ..... EON DNV VHP J24 FLM JOHNS (RNAV)-STAR .....

Chattanooga (CHA)..... EON DNV.....

Cincinnati (CVG)..... (RNAV only) EON DNV CEGRM (RNAV)-STAR .....

or

(all others) EON DNV SHELBYVILLE-STAR .....

Columbia (CAE)..... EON DNV VHP J24 FLM .....

Columbus (CMH)..... GIJ GIJ092036 FWA J178 APE .....

Dallas/Fort Worth (DFW) ..... RBS STL RZC FSM BYP .....

Dayton (DAY) ..... GIJ GIJ092036 FWA ROD DQJ .....

Denver (DEN)..... IOW DSM J10 LBF SAYGE-STAR .....

or

PLL PLL275065 FOD J94 ONL J114 SNY

LANDR-STAR .....

Detroit/Wayne (DTW)..... PETTY MKG POLAR-STAR .....

Evansville (EVV) ..... GUIDO .....

Fort Lauderdale (FLL)..... GUIDO J73 SZW J43 PIE FORTL-STAR .....

or

EON DNV TTH SWAPP ATL J89 HITTR PIE

FORTL-STAR .....

or

(GPS or DME/DME-IRU equipped) EON DNV TTH

SWAPP ATL J89 OTK JINGL (RNAV)-STAR .....

Greensboro (GSO)..... EON DNV VHP J24 FLM .....

Greer (GSP) ..... EON DNV VHP J24 FLM SOT SUG V185 UNMAN ...

Harrisburg (MDT)..... GIJ J146 J34 DJB J518 J152 HAR .....

Huntsville (HSV)..... EON DNV.....

Jacksonville (JAX)..... EON DNV TTH SWAPP ATL AMG ALMA-STAR .....

Kennedy (JFK)..... ELX CRL J554 JHW J70 LVZ LENDY-STAR .....

Knoxville (TYS)..... EON DNV VHP J24 FLM J43 XVV .....

La Guardia (LGA)..... GIJ J146 MIP MIP-STAR.....

Memphis (MEM)..... RBS FAM ARG GQE-STAR .....

or

GUIDO J73 PXV WLDER-STAR .....

Miami (MIA)..... GUIDO J73 SZW J43 PIE CYY-STAR .....

or

(Turbojets-GPS or DME/DME-IRU equipped) EON

DNV TTH SWAPP ATL SZW SSCOT

(RNAV)-STAR .....

Myrtle Beach (MYR)..... EON DNV VHP J24 FLM .....

Nashville (BNA)..... EON DNV TTH HEHAW-STAR .....

Newark (EWR)..... ELX CRL J584 SLT FQM-STAR.....

Norfolk (ORF)..... EON DNV VHP J24 MOL TERKS-STAR .....

Oakland (OAK) ..... PLL PLL275065 FOD J94 ONL J148 OAL MOD .....

or

PLL PLL275065 FOD J94 LCU J158 MVA.....

1500-0400

| Terminals                             | Route   | Effective Times (UTC) |
|---------------------------------------|---|-----------------------|
| Orlando Exec (ORL) .....              | EON DNV TTH BWG GQO ATL J89 OTK<br>LEESE-STAR .....   |                       |
| Orlando Intl (MCO) .....              | EON DNV TTH SWAPP ATL J89 OTK LEESE-STAR ..   |                       |
| Philadelphia (PHL) .....              | GIJ J146 CXR EWC JST BUNTS-STAR .....   |                       |
| Phoenix (PHX) .....                   | MZV STJ J18 FTI J19 ZUN BUNTR-STAR .....  | 1200-0400             |
|                                       | or  |                       |
| Pittsburgh (PIT) .....                | IOW J192 PWE J64 PUB ALS J102 .....   |                       |
| Pottstown (PTW) .....                 | GIJ J146 J34 DJB ACO V337 CUTTA .....   |                       |
| Raleigh-Durham (RDU) .....            | GIJ J146 CXR EWC JST .....  |                       |
| Richmond (RIC) .....                  | EON DNV VHP J24 FLM BKW ROA SBV-STAR .....  |                       |
| Roanoke (ROA) .....                   | EON DNV VHP J24 FLM .....   |                       |
| St. Petersburg-Clearwater (PIE) ..... | GUIDO J73 SZW DARBS-STAR .....  |                       |
| San Francisco (SFO) .....             | PLL PLL275065 FOD J94 FMG ILA PYE .....   | 1500-0400             |
| San Jose (SJC) .....                  | PLL PLL275065 FOD J94 FMG HYP-STAR .....  |                       |
|                                       | or  |                       |
| Sarasota/Bradenton (SRQ) .....        | DBQ J94 LCU HYP-STAR .....  | 1500-0400             |
| Tampa (TPA) .....                     | GUIDO J73 PXV J73 SZW CLAMP-STAR .....  |                       |
|                                       | GUIDO J73 PXV J73 SZW DARBS-STAR .....  |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) GUIDO J73 PXV<br>J73 SZW FOXX (RNAV)-STAR .....                         |                       |
| Toledo (TOL) .....                    | GIJ J146 PLAIN VWV .....  |                       |
| Washington Dulles (IAD) .....         | GIJ J146 J34 BUCKO-STAR .....   |                       |
| Washington Natl (DCA) .....           | GIJ J146 J34 SHAAR WZRRD-STAR .....   |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) GIJ J146 J34<br>BUCKO ELDEE (RNAV)-STAR .....                           |                       |
|                                       | or  |                       |
| West Palm Beach (PBI) .....           | GIJ J146 J34 SHAAR ELDEE (RNAV)-STAR .....  |                       |
|                                       | (all others) EON DNV TTH SWAPP ATL OTK WLACE<br>(RNAV)-STAR .....                                     |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) DENNT DARCY<br>DREGS DUMGE SWAPP ATL J89 OTK WLACE<br>(RNAV)-STAR ..... |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) EON DNV TTH<br>IIU J99 VXV J43 WLACE (RNAV)-STAR .....                  |                       |
|                                       | or  |                       |
|                                       | (all others) ORD EON DNV TTH SWAPP ATL OTK<br>WLACE (RNAV)-STAR .....                                 |                       |
| Windsor Locks (BDL) .....             | ELX CRL J554 JHW J82 WILET RKA292 RKA<br>SWEDE-STAR .....   |                       |
| <b>CHICAGO Midway (MDW) only</b>      |   |                       |
| Albany (ALB) .....                    | LEWKE GIJ EVOTE NELLS KEEHO JHW J82 .....   |                       |
| Allentown (ABE) .....                 | LEWKE GIJ J146 FJC .....  |                       |
| Atlanta (ATL) .....                   | CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR ..  |                       |
|                                       | or  |                       |
|                                       | CMSKY CARYN CYBIL PXV BNA ERLIN<br>(RNAV)-STAR .....  |                       |
| Baltimore (BWI) .....                 | LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR<br>KEMAN WESTMINSTER-STAR .....                               |                       |
| Birmingham (BHM) .....                | CMSKY CARYN CYBIL PXV .....   |                       |
| Bristol/Johnson/Kingsport (TRI) ..... | EARND ELANR EMMLY ETAME EMEGE FLM .....   |                       |
| Boca Raton (BCT) .....                | (GPS or DME/DME-IRU equipped) GUIDO J73<br>SZW PRRIE (RNAV)-STAR .....                                |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) EON DNV TTH<br>SWAPP ATL J89 OTK PRRIE (RNAV)-STAR .....                |                       |
|                                       | or  |                       |
|                                       | (GPS or DME/DME-IRU equipped) DENNT DARCY<br>DREGS DUMGE SWAPP ATL J89 OTK PRRIE<br>(RNAV)-STAR ..... |                       |
| Boston (BOS) .....                    | LEWKE GIJ EVOTE NELLS KEEHO JHW J82 ALB<br>GARDNER-STAR .....   |                       |

| Terminals                                | Route   | Effective Times (UTC) |
|--|---|-----------------------|
| Buffalo (BUF) .....                      | LEWKE GIJ EVOTE NELLs KEEHO DKK .....   |                       |
| Charleston (CHS, CRW) .....              | EARND ELANR EMMLY ETAME EMEGE FLM .....   |                       |
| Charlotte (CLT) .....                    | EARND ELANR EMMLY ETAME FLM JOHNS<br>(RNAV)-STAR .....  |                       |
| Chattanooga (CHA) .....                  | DENNT DARCY DREGS DONVE BWG .....   |                       |
| Cincinnati (CVG) .....                   | DENNT DARCY DNV CEGRM (RNAV)-STAR .....   |                       |
|  | or  |                       |
|  | DENNT DARCY DNV SHB-STAR .....  |                       |
| Cleveland (CLE) .....                    | ELX CRL HIMEZ-STAR .....  |                       |
|  | or  |                       |
|  | LEWKE GIJ CRL HIMEZ-STAR .....  |                       |
| Columbia (CAE) .....                     | EARND ELANR EMMLY ETAME EMEGE FLM .....   |                       |
| Columbus (CMH) .....                     | LEWKE GIJ SEWTO FWA GUNNE-STAR .....  |                       |
| Dallas/Fort Worth (DFW) .....            | ACITO ADELL ARLYN STL RZC FSM<br>BONHAM-STAR .....  |                       |
| Detroit Metro-Wayne Co (DTW) .....       | GIJ LFD MIZAR-STAR .....  |                       |
| Detroit Metro Area (ARB, PTK, YIP) ..... | GIJ LFD CRUX-STAR .....   |                       |
| Detroit Metro Area (DET, CYQG) .....     | GIJ LAN SPRTN-STAR .....  | 1200-0400             |
| Evansville (EVV) .....                   | DENNT DARCY DREGS DONVE .....   |                       |
| Fort Lauderdale (FLL) .....              | DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK JINGL (RNAV)-STAR .....  |                       |
|  | or  |                       |
|  | (GPS or DME/DME-IRU equipped) DENNT DARCY<br>DREGS DUMGE SWAPP ATL J89 OTK JINGL<br>(RNAV)-STAR .....               |                       |
|  | or  |                       |
|  | EON DNV TTH IJU J99 VXX J46 AMG TAY JINGL<br>(RNAV)-STAR .....  |                       |
|  | or  |                       |
|  | (GPS or DME/DME-IRU equipped) EON DNV TTH<br>SWAPP ATL J89 OTK JINGL (RNAV)-STAR .....                              |                       |
| Fort Myers (RSW) .....                   | CMSKY CARYN CYBIL PXV J73 SZW TYNEE<br>(RNAV)-STAR .....  |                       |
|  | or  |                       |
|  | (GPS or DME/DME-IRU equipped) GUIDO J73 PXV<br>J73 SZW TYNEE (RNAV)-STAR .....                                      |                       |
| Greensboro (GSO) .....                   | EARND ELANR EMMLY ETAME FLM PSK<br>SMOKN-STAR .....   |                       |
| Greenville-Spartanburg (GSP) .....       | EARND ELANR EMMLY ERECO IJU .....   |                       |
| Houston (HOU) .....                      | (GPS or DME/DME-IRU equipped) BACEN BLOKR<br>BEKKI FAM J137 LIT J180 SWB ROKIT<br>(RNAV)-STAR .....                 |                       |
|  | or  |                       |
|  | (Non-advanced NAV only) BACEN BLOKR BEKKI<br>FAM J137 LIT J180 SWB DAS-STAR .....                                   |                       |
| Houston (IAH) .....                      | (Turbojets-GPS or DME/DME-IRU equipped)<br>BACEN BLOKR BEKKI FAM J137 LIT J180 SWB<br>TXMEX (RNAV)-STAR .....       |                       |
|  | or  |                       |
|  | (Non-advanced NAV only) BACEN BLOKR BEKKI<br>FAM J137 LIT J180 SWB DAS-STAR .....                                   |                       |
| Huntsville (HSV) .....                   | DENNT DARCY DREGS DONVE BWG .....   |                       |
| Islip (ISP) .....                        | LEWKE GIJ EVOTE NELLs KEEHO JHW J70 STW<br>LENDY .....  |                       |
| Jacksonville (JAX) .....                 | DENNT DARCY DREGS DUMGE SWAPP AMG<br>ALMA-STAR .....  |                       |
| La Guardia (LGA) .....                   | LEWKE GIJ J146 ETG MILTON-STAR .....  |                       |
| Memphis (MEM) .....                      | BACEN BLOKR BEKKI FAM ARG GILMORE-STAR ...<br>or  |                       |
|  | CMSKY CARYN CYBIL PXV WLDER-STAR .....  |                       |
| Miami (MIA) .....                        | DENNT DARCY DREGS DUMGE SWAPP ATL SZW<br>J43 PIE CYPRESS-STAR .....   |                       |
|  | or  |                       |
|  | (Turbojets-GPS or DME/DME-IRU equipped)<br>DENNT DARCY DREGS DUMGE SWAPP ATL SZW<br>J86 OTK SSCOT (RNAV)-STAR ..... |                       |

# PREFERRED IFR ROUTES

359

| Terminals                              | Route   | Effective Times (UTC) |
|--|---|-----------------------|
|  | or<br>(Turbojets-GPS or DME/DME-IRU equipped)<br>GUIDO J73 SZW SSCOT (RNAV)-STAR.....                                   |                       |
|  | or<br>(Turbojets-GPS or DME/DME-IRU equipped) EON<br>DNV TTH IJU J99 VXV J46 AMG TAY SSCOT<br>(RNAV)-STAR.....          |                       |
|  | or<br>EON DNV TTH SWAPP ATL SZW J43 PIE<br>CYPRESS-STAR .....   |                       |
| Minneapolis (MSP) .....                | BAE EAU-STAR .....  | 1200-0400             |
| Manchester (MHT).....                  | LEWKE GIJ EVOTE NELS KEEHO JHW J82 ALB<br>EEN.....  |                       |
| Nashville (BNA).....                   | CMSKY CARYN CYBIL PXV CCT HEHAW-STAR .....  |                       |
| Newark (EWR).....                      | LEWKE GIJ EVOTE NELS KEEHO J584 SLT FQM<br>WILLIAMSPORT-STAR .....  |                       |
| New Orleans (MSY) .....                | BACEN BLOKR BEKKI ENL J71 MEM J35 MCB<br>RYTHM-STAR .....   |                       |
| Norfolk (ORF).....                     | EARND ELANR EMMLY ETAME EMEGE FLM J24<br>MOL TERKS-STAR .....   |                       |
| Orlando (MCO/ORL) .....                | DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK PIGLT (RNAV)-STAR .....  |                       |
|  | or<br>DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK LEESE-STAR.....  | 1100-0400             |
| Phoenix (PHX).....                     | MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR.....  | 1200-0400             |
|  | or<br>MZV LMN J64 HLC LAA J102 GUP EAGUL<br>(RNAV)-STAR.....  |                       |
| Philadelphia (PHL).....                | LEWKE GIJ J146 CXR EWC JST BUNTS-STAR .....   |                       |
| Pittsburgh (PIT).....                  | LEWKE GIJ OTENS ANEWA RIEKE DJB ACO<br>CUTTA-STAR .....   |                       |
| Providence (PVD) .....                 | LEWKE GIJ EVOTE NELS KEEHO JHW J82<br>MEMMS J522 HNK TEDDY .....  |                       |
| Raleigh/Durham (RDU) .....             | EARND ELANR EMMLY ETAME EMEGE FLM BKW<br>ROA SOUTH BOSTON-STAR .....  |                       |
| Richmond (RIC).....                    | EARND ELANR ETAME EMEGE FLM J24 FAK .....   |                       |
| Rochester (ROC).....                   | LEWKE GIJ EVOTE NELS KEEHO DKK BUF .....  |                       |
| Saint Petersburg/Clearwater (PIE)..... | CMSKY CARYN CYBIL PXV J73 SZW<br>DARBS-STAR.....  |                       |
| Sarasota/Bradenton (SRQ) .....         | CMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR .....  |                       |
| Tampa (TPA).....                       | CMSKY CARYN CYBIL PXV J73 SZW FOOXX<br>(RNAV)-STAR.....   |                       |
|  | or<br>CMSKY CARYN CYBIL PXV J73 SZW<br>DARBS-STAR.....  |                       |
| Teterboro (TEB).....                   | LEWKE GIJ EVOTE NELS KEEHO JHW J70 LVZ<br>WILKES BARRE-STAR .....   |                       |
| Trenton (TTN) .....                    | LEWKE GIJ J146 CXR EWC JST BUNTS-STAR .....   |                       |
| Washington Dulles (IAD) .....          | LEWKE GIJ OTENS ANEWA RIEKE DJB J34 AIR<br>MGW MGW121 VERNI ESL ROYIL-STAR .....  |                       |
|  | or<br>(GPS or DME/DME-IRU equipped) LEWKE GIJ<br>OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI<br>ESL SHNON (RNAV)-STAR ..... |                       |
| Washington Natl (DCA) .....            | (GPS or DME/DME-IRU equipped) GIJ J146 J34<br>BUCKO ELDEE (RNAV)-STAR.....  |                       |
|  | or<br>LEWKE GIJ OTENS ANEWA RIEKE DJB J34 SHAAR<br>WZRRD-STAR .....   |                       |
|  | or<br>(GPS or DME/DME-IRU equipped) LEWKE GIJ<br>OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE<br>(RNAV)-STAR.....              |                       |
| White Plains (HPN) .....               | LEWKE GIJ EVOTE NELS KEEHO JHW ITH DNY<br>VALRE-STAR .....  |                       |

| Terminals  | Route   |           |
|--|---|-----------|
| Windsor Locks (BDL) .....                              | LEWKE GIJ EVOTE NELLIS KEEHO JHW J82 WILET<br>SWEDE-STAR .....  |           |
| <b>CHICAGO O'Hare (ORD) only</b>                       |   |           |
| Akron (CAK) .....                                      | MOBLE ADIME OTENS VWV MFD V8 DALTS .....  |           |
| Albany (ALB) .....                                     | EBAKE WISMO POSTS PADDE SVM DKK .....   |           |
| Allentown (ABE) .....                                  | MOBLE ADIME GERBS J146 MIP .....  |           |
| Andrews AFB (ADW) .....                                | MOBLE ADIME OTENS ANEWA RIEKE DJB J34<br>SHAAR WZRRD-STAR .....   |           |
| Atlanta (ATL) .....                                    | CMSKY CARYN CYBIL PXV J73 BNA ROME-STAR ..<br>or<br>CMSKY CARYN CYBIL PXV BNA ERLIN<br>(RNAV)-STAR .....    |           |
| Atlantic City (ACY) .....                              | MOBLE ADIME GERBS J146 CXR EWC JST J152<br>HAR SIE .....  |           |
| Baltimore (BWI) .....                                  | MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR<br>KEMAN WESTMINSTER-STAR .....                                   |           |
| Bedford (BED) .....                                    | EBAKE WISMO POSTS PADDE SVM DKK ALB GDM<br>V431 LOBBY .....   |           |
| Birmingham (BHM) .....                                 | CMSKY CARYN CYBIL PXV .....   |           |
| Boca Raton (BCT) .....                                 | (GPS or DME/DME-IRU equipped) GUIDO J73<br>SZW PRRIE (RNAV)-STAR .....                                      |           |
|  | or<br>(GPS or DME/DME-IRU equipped) EON DNV TTH<br>SWAPP ATL J89 PRRIE (RNAV)-STAR .....                    |           |
|  | or<br>(GPS or DME/DME-IRU equipped) DENNT DARCY<br>DREGS DUMGE SWAPP ATL J89 OTK PRRIE<br>(RNAV)-STAR ..... |           |
| Boston (BOS) .....                                     | EBAKE WISMO POSTS PADDE SVM DKK ALB<br>GARDNER-STAR .....   |           |
| Bristol/Johnson/Kingsport (TRI) .....                  | EARND ELANR EMMLY ETAME EMEGE FLM .....   |           |
| Buffalo (BUF) .....                                    | DUFEE ELX HAAKK DOXXY SOSIC COHOW DKK .....   |           |
| Burlington (BTV) .....                                 | EBAKE WISMO POSTS PADDE SVM DKK SYR J29<br>LAGGS .....  |           |
| Charleston (CHS, CRW) .....                            | EARND ELANR EMMLY ETAME EMEGE FLM .....   |           |
| Charlotte (CLT) .....                                  | EARND ELANR EMMLY ETAME FLM JOHNS<br>(RNAV)-STAR .....  |           |
| Chattanooga (CHA) .....                                | DENNT DARCY DREGS DONVE BWG .....   |           |
| Cincinnati (CVG) .....                                 | DENNT DARCY DNV CEGRM (RNAV)-STAR .....   |           |
|  | or<br>DENNT DARCY DNV SHELBYVILLE-STAR .....  |           |
| Cleveland (CLE) .....                                  | DUFEE ELX HIMEZ-STAR .....  |           |
| Columbia (CAE) .....                                   | EARND ELANR EMMLY ETAME EMEGE FLM .....   |           |
| Columbus (CMH) .....                                   | MOBLE ADIME SEWTO FWA GUNNE-STAR .....  |           |
| Dallas/Fort Worth (DFW) .....                          | ACITO ADELL ARLYN STL RZC FSM<br>BONHAM-STAR .....  |           |
| Denver (DEN) .....                                     | IOW DSM J10 LBF SAYGE-STAR .....  |           |
|  | or<br>DBQ J94 ONL J114 SNY LANDR-STAR .....   |           |
| Detroit Metro-Wayne Co (DTW) .....                     | PETTY MKG POLAR-STAR .....  |           |
| Detroit Metro Area (DET, CYQG, PTK, YIP,<br>ARB) ..... | PETTY GRR LAN SPRTN-STAR .....  | 1200-0400 |
| Evansville (EVV) .....                                 | DENNT DARCY DREGS DONVE .....   |           |
| Fort Lauderdale (FLL) .....                            | DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK JINGL (RNAV)-STAR .....  |           |
|  | or<br>DENNT DARCY DREGS SWAPP ATL J89 OTK JINGL<br>(RNAV)-STAR .....  |           |
|  | (GPS or DME/DME-IRU equipped) EON DNV TTH<br>IIU J99 VXV J46 AMU TAY JINGL (RNAV)-STAR ..                   |           |
| Fort Myers (RSW) .....                                 | (GPS or DME/DME-IRU equipped) CMSKY CARYN<br>CYBIL PXV J73 SZW TYNEE (RNAV)-STAR .....                      |           |
|  | or<br>(GPS or DME/DME-IRU equipped) GUIDO J73 PXV<br>J73 SZW TYNEE (RNAV)-STAR .....                        |           |
| Greensboro (GSO) .....                                 | EARND ELANR EMMLY ETAME EMEGE FLM PSK<br>SMOKN-STAR .....   |           |



| Terminals                         | Route   | Effective Times (UTC) |
|-----------------------------------|---|-----------------------|
| Greenville/Spartanburg (GSP)..... | EARND ELANR EMMLY ERECO IIU .....   |                       |
| Harrisburg (MDT).....             | MOBLE ADIME GERBS J146 CXR EWC HAR .....  |                       |
| Houston (HOU) .....               | (GPS or DME/DME-IRU equipped) BACEN BLOKR<br>BEKKI FAM J137 LIT J180 SWB ROKIT<br>(RNAV)-STAR .....               |                       |
|                                   | or<br>(Non-advanced NAV only) BACEN BLOKR BEKKI<br>FAM J137 LIT J180 SWB DAS-STAR .....                           |                       |
| Houston (IAH) .....               | (Turbojets-GPS or DME/DME-IRU equipped)<br>BACEN BLOKR BEKKI FAM J137 LIT J180 SWB<br>TXMEX (RNAV)-STAR .....     |                       |
|                                   | or<br>(Non-advanced NAV only) BACEN BLOKR BEKKI<br>FAM J137 LIT J180 SWB DAS-STAR .....                           |                       |
| Huntsville (HSV).....             | DENNT DARCY DREGS DONVE BWG .....   |                       |
| Hyannis (HYA).....                | EBAKE WISMO POSTS PADDE SVM DKK ALB ENE<br>LFV .....  |                       |
| Indianapolis (IND) .....          | EARND ELANR EMMLY JAKKS .....   |                       |
| Jacksonville (JAX).....           | DENNT DARCY DREGS DUMGE SWAPP ATL AMG<br>ALMA-STAR.....   |                       |
| Kennedy (JFK).....                | DUFEE ELX HAAKK DOXXY SOSIC JHW J70 LVZ<br>LENDY-STAR .....   |                       |
| Knoxville (TYS).....              | EARND ELANR EMMLY ETAME EMEGE J43 VXV ...   |                       |
| La Guardia (LGA).....             | MOBLE ADIME GERBS J146 ETG MILTON-STAR ...  |                       |
| Louisville (LOU) .....            | DENNT DARCY DREGS DUMGE CHERI .....   |                       |
| Manchester (MHT).....             | EBAKE WISMO POSTS PADDE SVM DKK ALB EEN .   |                       |
| Memphis (MEM).....                | BACEN BLOKR BEKKI FAM ARG GILMORE-STAR ...<br>or<br>CMSKY CARYN CYBIL PXV WLDER-STAR .....                        |                       |
| Miami (MIA).....                  | DENNT DARCY DREGS DUMGE SWAPP ATL SZW<br>J43 PIE CYPRESS-STAR.....  |                       |
|                                   | or<br>(Turbojets-GPS or DME/DME-IRU equipped)<br>DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>SSCOT (RNAV)-STAR ..... |                       |
|                                   | or<br>(Turbojets-GPS or DME/DME-IRU equipped)<br>GUIDO J73 SZW SSCOT (RNAV)-STAR .....                            |                       |
|                                   | or<br>(Turbojets-GPS or DME/DME-IRU equipped) EON<br>DNV TTH IIU J99 VXV J46 AMG TAY SSCOT<br>(RNAV)-STAR.....    |                       |
|                                   | or<br>EON DNV TTH SWAPP ATL SZW J43 PIE<br>CYY-STAR.....  |                       |
| Minneapolis (MSP) .....           | PLL PLL275065 ALO KASPR-STAR .....  | 1200-0400             |
| Nashville (BNA).....              | CMSKY CARYN CYBIL PXV CCT HEHAW-STAR .....  |                       |
| Niagara Falls (IAG) .....         | EBAKE WISMO POSTS PADDE SVM YXU .....   |                       |
| Newark (EWR).....                 | DUFEE ELX HAAKK DOXXY SOSIC KEEHO J584<br>SLT FQM WILLIAMSPORT-STAR .....   |                       |
| New Orleans (MSY) .....           | BACEN BLOKR BEKKI ENL J71 MEM J35 MCB<br>RHYTHM-STAR .....  |                       |
|                                   | or<br>EARND ELANR EMMLY ERECO IIU RYANS .....   |                       |
| Norfolk (ORF).....                | EARND ELANR EMMLY ETAME EMEGE FLM J24<br>MOL TERKS-STAR .....   |                       |
| Newburgh (SWF).....               | DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY<br>V483 FILPS .....   |                       |
| New Haven (HVN).....              | DUFEE ELX HAAKK DOXXY SOSIC JHW RKA<br>DENNA-STAR.....  |                       |

| Terminals                               | Route   | Effective Times (UTC) |
|---|---|-----------------------|
| Orlando (MCO/ORL) .....                 | DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK PIGLT (RNAV)-STAR .....  |                       |
|   | or  |                       |
|   | DENNT DARCY DREGS DUMGE SWAPP ATL<br>LEESE-STAR .....   |                       |
|   | or  |                       |
|   | DENNT DARCY DREGS DUMGE SWAPP ATL J89<br>OTK LEESE-STAR .....   | 1100-0400             |
| Philadelphia (PHL) .....                | MOBLE ADIME GERBS J146 CXR EWC JST<br>BUNTS-STAR .....  |                       |
| Phoenix (PHX) .....                     | MZV J18 FTI J19 ZUN EAGUL (RNAV)-STAR .....   | 1200-0400             |
|   | or  |                       |
|   | MZV LMN J64 HLC LAA J102 GUP EAGUL<br>(RNAV)-STAR .....   |                       |
| Pittsburgh (PIT) .....                  | MOBLE ADIME OTENS ANEWA RIEKE DJB ACO<br>CUTTA-STAR .....   |                       |
| Portland (PWM) .....                    | EBAKE WISMO POSTS PADDE SVM DKK ALB CON<br>PARSO .....  |                       |
|   | or  |                       |
|   | MOBLE ADIME GERBS J146 CXR EWC JST SIE .....  |                       |
| Providence (PVD) .....                  | DUFEE ELX HAAKK DOXXY SOSIC JHW J82<br>MEMMS J522 HNK TEDDY-STAR .....  |                       |
| Raleigh/Durham (RDU) .....              | EARND ELANR EMMLY ETAME EMEGE FLM BKW<br>ROA SOUTH BOSTON-STAR .....  |                       |
| Richmond (RIC) .....                    | EARND ELANR EMMLY ETAME EMEGE FLM J24<br>FAK .....  |                       |
| Roanoke (ROA) .....                     | EARND ELANR EMMLY ETAME EMEGE FLM .....   |                       |
| Rochester (ROC) .....                   | DUFEE ELX HAAKK DOXXY SOSIC COHOW DKK<br>BUF .....  |                       |
| Saint Petersburg/Clearwater (PIE) ..... | CMSKY CARYN CYBIL PXV J73 SZW<br>DARBS-STAR .....   |                       |
|   | or  |                       |
|   | MOBLE ADIME GERBS J146 CXR EWC JST SIE .....  |                       |
| San Juan (TJSJ) .....                   | CMSKY CARYN CYBIL PXV J73 SZW CLAMP-STAR .....  |                       |
| Sarasota/Bradenton (SRQ) .....          | EBAKE WISMO POSTS PADDE SVM DKK .....   |                       |
| Syracuse (SYR) .....                    | CMSKY CARYN CYBIL PXV J73 SZW<br>DARBS-STAR .....   |                       |
|   | or  |                       |
|   | CMSKY CARYN CYBIL PXV J73 SZW FOXXX<br>(RNAV)-STAR .....  |                       |
| Washington Dulles (IAD) .....           | MOBLE ADIME OTENS ANEWA RIEKE DJB J34 AIR<br>MGW MGW121 VERNI ESL ROYIL-STAR .....                                  |                       |
|   | or  |                       |
|   | (GPS or DME/DME-IRU equipped) MOBLE ADIME<br>OTENS ANEWA RIEKE DJB J34 AIR MGW VERNI<br>ESL SHNON (RNAV)-STAR ..... |                       |
| Washington Natl (DCA) .....             | MOBLE ADIME OTENS ANEWA RIEKE DJB J34<br>BUCKO BUCKO-STAR .....   |                       |
|   | or  |                       |
|   | MOBLE ADIME OTENS ANEWA RIEKE DJB J34<br>SHAAR WZRRD-STAR .....   |                       |
|   | or  |                       |
|   | (GPS OR DME/DME-IRU equipped) MOBLE ADIME<br>OTENS ANEWA RIEKE DJB J34 SHAAR ELDEE<br>(RNAV)-STAR .....             |                       |
| White Plains (HPN) .....                | DUFEE ELX HAAKK DOXXY SOSIC JHW ITH DNY<br>VALRE-STAR .....   |                       |
| Wilkes-Barre/Scranton (AVP) .....       | DUFEE ELX HAAKK DOXXY SOSIC JHW J106 LVZ ..   |                       |
| Windsor Locks (BDL) .....               | DUFEE ELX HAAKK DOXXY SOSIC JHW J82 WILET<br>SWEDE-STAR .....   |                       |
| <b>CINCINNATI (CVG)</b>                 |   |                       |
| Albany (ALB) .....                      | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB .....  |                       |
| Allentown (ABE) .....                   | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY JST HAR .....  |                       |

| Terminals                     | Route   | Effective Times (UTC) |
|-------------------------------|---|-----------------------|
| Atlanta (ATL) .....           | (RNAV only) BLUEGRASS-DP BWG ERLIN<br>(RNAV)-STAR ..... |                       |
|                               | or  |                       |
|                               | (all others) BLUEGRASS-DP BWG ROME-STAR....             |                       |
| Baltimore (BWI) .....         | V128 YRK HVQ J8 CSN OTT-STAR .....                      |                       |
|                               | or  |                       |
|                               | (GPS or DME/DME-IRU equipped) V128 YRK HVQ              |                       |
|                               | J8 CSN RAVNN (RNAV)-STAR .....                          |                       |
| Birmingham (BHM) .....        | BLUEGRASS-DP TRFWA LVT SYI VUZ .....                    |                       |
| Boca Raton (BCT) .....        | (GPS or DME/DME-IRU equipped)                           |                       |
|                               | BLUEGRASS-DP TRFWA NOTWO WALET HITTR                    |                       |
|                               | LATHY PRRIE (RNAV)-STAR .....                           |                       |
|                               | or  |                       |
|                               | (GPS or DME/DME-IRU equipped)                           |                       |
|                               | BLUEGRASS-DP HYK VXV J43 ATL J89 OTK                    |                       |
|                               | PRRIE (RNAV)-STAR .....                                 |                       |
| Boston (BOS) .....            | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE                 |                       |
|                               | AHTIY PSB HNK ALB GDM GARDNER-STAR .....                |                       |
| Chicago O'Hare (ORD) .....    | (Advanced Nav only) MIE MZZ ROYKO-STAR .....            |                       |
|                               | or  |                       |
|                               | (Non-Advanced Nav only) DQN FWA KNOX-STAR ..            |                       |
|                               | or  |                       |
|                               | DQN FWA WATSN (RNAV)-STAR .....                         |                       |
| Dallas/Fort Worth (DFW) ..... | IU PVX J131 LIT BYP .....                               |                       |
| Fort Lauderdale (FLL) .....   | (GPS or DME/DME-IRU equipped)                           |                       |
|                               | BLUEGRASS-DP TRFWA NOTWO OTK JINGL                      |                       |
|                               | (RNAV)-STAR .....                                       |                       |
|                               | or  |                       |
|                               | (all others) BLUEGRASS-DP HYK VXV J43 ATL J89           |                       |
|                               | HITTR J75 FORTL-STAR .....                              |                       |
| Fort Myers (FMY) .....        | (Turbojets-GPS or DME/DME-IRU equipped) HYK             |                       |
|                               | VXV J43 SZW TYNEE (RNAV)-STAR .....                     |                       |
| Fort Myers (RSW) .....        | (GPS or DME/DME-IRU equipped) HYK VXV J43               |                       |
|                               | SZW TYNEE (RNAV)-STAR .....                             | 1100-0300             |
| Harrisburg (MDT) .....        | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE                 |                       |
|                               | AHTIY JST HAR .....                                     |                       |
| Houston (HOU) .....           | (GPS or DME/DME-IRU equipped) LIT J180 SWB              |                       |
|                               | ROKIT (RNAV)-STAR .....                                 |                       |
|                               | or  |                       |
|                               | (Non-advanced NAV only) LIT J180 SWB                    |                       |
|                               | DAS-STAR .....  |                       |
| Houston (IAH) .....           | (Turbojets-GPS or DME/DME-IRU equipped) LIT             |                       |
|                               | J180 SWB TXMEX (RNAV)-STAR .....                        |                       |
|                               | or  |                       |
|                               | (Non-advanced NAV only) LIT J180 SWB                    |                       |
|                               | DAS-STAR .....  |                       |
| Jackson (JAN) .....           | BLUEGRASS-DP TRFWA LVT SYI VUZ JAN .....                |                       |
| La Guardia (LGA) .....        | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE                 |                       |
|                               | AHTIY PSB MILTON-STAR .....                             | 1000-1800             |
| Manchester (MHT) .....        | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE                 |                       |
|                               | AHTIY PSB ALB EEN .....                                 |                       |
| Marco Island (MKY) .....      | HYK VXV J43 SZW PIKKR (RNAV)-STAR .....                 |                       |
| Miami (MIA) .....             | (Turbojets-GPS or DME/DME-IRU equipped)                 |                       |
|                               | BLUEGRASS-DP TRFWA NOTWO SZW SSCOT                      |                       |
|                               | (RNAV)-STAR .....                                       |                       |
|                               | or  |                       |
|                               | (all others) BLUEGRASS-DP HYK VXV J43 ATL               |                       |
|                               | SZW J43 PIE CYY-STAR .....                              |                       |
| Mobile (MOB) .....            | BLUEGRASS-DP TRFWA LVT SYI VUZ SJI .....                |                       |
| Naples (APF) .....            | HYK VXV J43 SZW PIKKR (RNAV)-STAR .....                 |                       |
| Newark (EWR) .....            | ROD J29 J584 SLT FQM-STAR .....                         |                       |
| Newburg (SWF) .....           | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE                 |                       |
|                               | AHTIY PSB J49 HNK DNY V483 FILPS .....                  |                       |
| New Orleans (MSY) .....       | BLUEGRASS-DP TRFWA LVT SYI VUZ J22 MEI                  |                       |
|                               | RYTHM-STAR .....  |                       |
| Orlando Exec (ORL) .....      | HYK VXV J99 IRQ J85 AMG LEESE-STAR .....                | 1100-0300             |

| Terminals  | Route   | Effective Times (UTC) |
|--|---|-----------------------|
|  | or<br>(GPS or DME/DME-IRU equipped) HYK VXV J99<br>IRQ J85 AMG SHEMP MTATA PIGLT<br>(RNAV)-STAR ..... | 1100-0400             |
| Orlando Intl (MCO) .....                         | HYK VXV J99 IRQ J85 AMG LEESE-STAR .....  | 1100-0300             |
|  | or<br>(GPS or DME/DME-IRU equipped) HYK VXV J99<br>IRQ J85 AMG BUGGZ (RNAV)-STAR .....                | 1100-0400             |
| Philadelphia (PHL) .....                         | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY JST BUNTS-STAR .....                                 |                       |
| Phoenix (PHX) .....                              | FAM J78 ABQ J18 .....   |                       |
|  | or<br>FAM J78 IRW J74 SJN J18 .....   |                       |
| Portland (PWM) .....                             | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB J49 ALB ENE .....                                |                       |
| Providence (PVD) .....                           | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB J49 HNK TEDDY-STAR .....                         |                       |
| Sarasota/Bradenton (SRQ) .....                   | HYK VXV J43 SZW CLAMP-STAR .....  |                       |
| Tampa (TPA) .....                                | HYK VXV J43 SZW DARBS-STAR .....  |                       |
|  | or<br>(GPS or DME/DME-IRU equipped) HYK VXV J43<br>SZW FOXXX (RNAV)-STAR .....                        |                       |
| Washington Dulles (IAD) .....                    | V128 YRK HVQ ROYIL-STAR .....   |                       |
|  | or<br>V128 YRK HVQ SHNON (RNAV)-STAR .....  |                       |
| Washington Natl (DCA) .....                      | V128 YRK HVQ WZRRD-STAR .....   |                       |
|  | or<br>V128 YRK HVQ ELDEE (RNAV)-STAR .....  |                       |
| West Palm Beach (PBI) .....                      | (GPS OR DME/DME-IRU equipped)<br>BLUEGRASS-DP TRFWA NOTWO OTK WLACE ....                              |                       |
|  | or<br>(GPS or DME/DME-IRU equipped)<br>BLUEGRASS-DP HYK VXV J43 ATL J89 OTK<br>WLACE .....            |                       |
| Wilkes Barre/Scranton (AVP) .....                | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB LVZ .....  |                       |
| Windsor Locks (BDL) .....                        | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB RKA SWEDE SWEDE-STAR .....                       |                       |
| <b>From LUNKEN (LUK) only:</b>                   |   |                       |
| Albany (ALB) .....                               | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB .....  |                       |
| Boston (BOS) .....                               | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB HNK ALB GDM GARDNER-STAR .....                   |                       |
| La Guardia (LGA) .....                           | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB MILTON-STAR .....                                | 1000-1800             |
| Manchester (MHT) .....                           | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB ALB EEN .....                                    |                       |
| Newburgh (SWF) .....                             | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB J49 HNK DNV V483 FILPS .....                     |                       |
| Philadelphia (PHL) .....                         | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY JST BUNTS-STAR .....                                 |                       |
| Providence (PVD) .....                           | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB J49 HNK TEDDY-STAR .....                         |                       |
| Portland (PWM) .....                             | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB J49 ALB ENE .....                                |                       |
| Wilkes Barre/Scranton (AVP) .....                | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB LVZ .....  |                       |
| Windsor Locks (BDL) .....                        | (RNAV only) ROCKT (RNAV)-DP ROCKT CADRE<br>AHTIY PSB RKA SWEDE SWEDE-STAR .....                       |                       |
| <b>CLEVELAND METRO (CLE, CGF, BKL, LNN, LPR)</b> |   |                       |
| Atlanta (ATL) .....                              | (RNAV only) DJB DJB173 HERAK APE035 APE<br>J186 SOT ODF FLCON (RNAV)-STAR .....                       |                       |
|  | or<br>(all others) DJB DJB173 HERAK APE035 APE<br>J186 SOT ODF WHINZ-STAR .....                       |                       |

Effective  
Times  
(UTC)

| Terminals                          | Route   |
|------------------------------------|---|
| Battle Creek (BTL) .....           | AMRST-DP VWV .....  |
| Birmingham (BHM) .....             | DJB DJB173 HERAK APE035 APE J186 BULEY .....  |
| Boca Raton (BCT) .....             | (GPS or DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J83 SPA J85 TAY PRRIE<br>(RNAV)-STAR .....             |
| Charleston (CHS) .....             | DJB DJB173 HERAK APE035 APE J186 BULEY .....  |
| Charleston (CRW) .....             | DJB DJB173 HERAK APE035 APE .....   |
| Charlotte (CLT) .....              | DJB DJB173 HERAK APE035 APE HVQ HMV<br>JOHNS (RNAV)-STAR .....  |
| Chicago Midway (MDW) .....         | AMRST-DP VWV GSH GSH-STAR .....   |
| Chicago O'Hare (ORD) .....         | AMRST-DP VWV ZANLA WATSON (RNAV)-STAR ....<br>or<br>AMRST-DP VWV OXI KNOX-STAR .....                                |
| Chicago Rockford (RFD) .....       | ALPHE-DP ALPHE J70 PMM .....  |
| Cincinnati (CVG) .....             | (RNAV only) DJB HERAK APE TIGRR (RNAV)-STAR .<br>or<br>(all others) DJB DJB173 HERAK APE035 APE<br>CINCE-STAR ..... |
| Dallas/Fort Worth (DFW) .....      | OBRNL-DP RID RID234/40 PXV LIT<br>BONHAM-STAR .....   |
| Denver (DEN) .....                 | AMRST-DP VWV GSH .....  |
| Elkhart (EKM) .....                | AMRST-DP VWV GSH .....  |
| Fort Lauderdale (FLL) .....        | DJB DJB173 HERAK APE035 APE J83 SPA J85<br>TAY J75 HITTR PIE FORTL-STAR .....                                       |
|                                    | or<br>(GPS or DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J83 SPA J85 TAY J75<br>JINGL (RNAV)-STAR .....   |
| Fort Myers (FMY) .....             | DJB DJB200 APE021 APE J186 J91 VXV J43 SZW<br>TYNEE (RNAV)-STAR .....   |
| Fort Myers (RSW) .....             | (GPS OR DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J186 J91 VXV J43 SZW<br>TYNEE (RNAV)-STAR .....        |
| Fort Wayne (FWA) .....             | OBRNL-DP FWA .....  |
| Grand Rapids (GRR) .....           | (RNAV only) ALPHE-DP ALPHE .....  |
| Greensboro (GSO) .....             | DJB DJB173 HERAK APE035 APE J186 BULEY .....  |
| Houston (HOU) .....                | (GPS or DME/DME-IRU equipped) OBRNL-DP RID<br>RID234/40 PXV LIT J180 SWB ROKIT<br>(RNAV)-STAR .....                 |
|                                    | or<br>(Non-advanced NAV only) OBRNL-DP RID<br>RID234/40 PXV LIT J180 SWB DAS-STAR .....                             |
| Houston (IAH) .....                | (Non-advanced NAV only) OBRNL-DP RID<br>RID234/40 PXV LIT J80 SWB DAS-STAR .....                                    |
|                                    | or<br>(Turbojets-GPS or DME/DME-IRU equipped)<br>OBRNL-DP RID234/40 PXV LIT J180 SWB<br>TXMEX (RNAV)-STAR .....     |
| Jacksonville (JAX) .....           | DJB DJB173 HERAK APE035 APE J83 SPA J85<br>AMG ALM-STAR .....   |
| Kalamazoo/Battle Creek (AZO) ..... | AMRST-DP VWV .....  |
| Kansas City (MCI) .....            | OBLRN-DP VHP J80 SPI BRAYMER-STAR .....   |
| Kennedy (JFK) .....                | FAILS V522 ERI JHW J70 LVZ LENDY-STAR .....   |
| La Guardia (LGA) .....             | V522 FAILS V188 JFN ETG MIP-STAR .....  |
| Knoxville (TYS) .....              | DJB DJB173 HERAK APE035 APE J186 BULEY .....  |
| Las Vegas (LAS) .....              | OBRNL-DP VHP STL .....  |
|                                    | or<br>AMRST-DP VWV GSH .....  |
| Lewisburg (LWB) .....              | DJB DJB173 HERAK APE035 APE .....   |
| Lexington (LEX) .....              | OBRNL-DP ROD CVG CLEGG-STAR .....   |
| Little Rock (LIT) .....            | OBLRN-DP RID RID234/40 PXV .....  |
| Los Angeles (LAX) .....            | AMRST-DP VWV GSH .....  |
| Louisville (SDF) .....             | OBRNL-DP ROD CVG REDSTONE-STAR .....  |

| Terminals                       | Route  | Effective Times (UTC) |
|---------------------------------|--|-----------------------|
| Minneapolis (MSP) .....         | (RNAV only) ALPHE-DP ALPHE J70 PMM BAE<br>EAU-STAR .....   |                       |
|                                 | or   |                       |
|                                 | AMRST-DP CRL J34 BAE EAU-STAR .....  |                       |
| Madison (MSN) .....             | (RNAV only) ALPHE-DP ALPHE J70 PMM .....   |                       |
| Marco Island (MKY) .....        | DJB DJB200 APE021 APE J186 J91 VXV J43 SZW<br>PIKKR (RNAV)-STAR .....  |                       |
|                                 | or   |                       |
|                                 | DJB DJB200 APE021 APE J186 J91 ATL J89 J75<br>TEPEE ZEILR-STAR .....   |                       |
| Memphis (MEM) .....             | OBRLN-DP RID RID234/40 PXV WLDER-STAR .....  |                       |
| Miami (MIA) .....               | DJB DJB173 HERAK APE035 APE J83 SPA J85<br>TAY J75 HITTR PIE CYPRESS-STAR .....                              |                       |
|                                 | or   |                       |
|                                 | (/E/G/R/J/L/Q only) DJB DJB173 HERAK<br>APE035 APE J83 SPA J85 TAY J75 RSW DEEDS<br>(RNAV)-STAR .....        |                       |
| Milwaukee (MKE) .....           | AMRST-DP CRL CRL316/75 MKG V2 SUDDS .....  |                       |
| Myrtle Beach (MYR) .....        | DJB DJB173 HERAK APE035 APE .....  |                       |
| Naples (APF) .....              | DJB DJB200 APE021 APE J186 J91 VXV J43 SZW<br>PIKKR (RNAV)-STAR .....  |                       |
| Nashville (BNA) .....           | OBRLN-DP IIU GUITR-STAR .....  |                       |
| Newark (EWR) .....              | V522 J584 SLT FQM-STAR .....   |                       |
| New Orleans (MSY) .....         | OBRLN-DP RID IIU MCB RYTHM-STAR .....  |                       |
| Orlando (ORL) .....             | (RADAR and DME required) DJB DJB200 APE021<br>APE J83 SPA CAE SAV OMN CORLL-STAR .....                       | 1100-0400             |
| Orlando (MCO) .....             | DJB DJB173 HERAK APE035 APE J83 SPA CAE<br>SAV OMN BITHO-STAR .....  |                       |
|                                 | or   |                       |
|                                 | (GPS or DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J83 SPA CAE SAV OMN<br>CWRLD (RNAV)-STAR .....  | 1100-0400             |
| Palwaukee (PWK) .....           | (RNAV only) ALPHE-DP ALPHE J70 PMM OBK .....   |                       |
| Philadelphia (PHL) .....        | ACO ACO145 J518 J152 HAR V210 BUNTS .....  |                       |
| Phoenix (PHX) .....             | OBRLN-DP VHP STL .....   |                       |
|                                 | or   |                       |
|                                 | AMRST-DP VWV GSH .....   |                       |
| Raleigh/Durham (RDU) .....      | DJB DJB173 HERAK APE035 APE HVQ BKW ROA<br>SOUTH- BOSTON-STAR .....  |                       |
| San Antonio (SAT) .....         | OBRLN-DP RID RID234/40 PXV J131 LIT J101<br>LFK MARCS-STAR .....   |                       |
| San Francisco (SFO) .....       | AMRST-DP VWV GSH .....   |                       |
| St. Louis (STL) .....           | OBRLN-DP VHP VANDALIA-STAR .....   |                       |
| Sarasota/Bradenton (SRQ) .....  | DJB DJB200 APE021 APE J186 J91 VXV J43 SZW<br>CLAMP-STAR .....   |                       |
| Seattle/Tacoma (SEA) .....      | (RNAV only) ALPHE-DP ALPHE J70 PMM .....   |                       |
|                                 | or   |                       |
|                                 | (RNAV only) ALPHE-DP ALPHE J34 BAE .....   |                       |
| South Bend (SBN) .....          | AMRST-DP VWV GSH .....   |                       |
| Tampa (TPA) .....               | DJB DJB173 HERAK APE035 APE J186 J91 VXV<br>J43 SZW DARBS-STAR .....   |                       |
|                                 | or   |                       |
|                                 | (GPS or DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J186 J91 VXV J43 SZW<br>FOXXX (RNAV)-STAR ..... |                       |
| Toledo (TOL) .....              | AMRST-DP VWV .....   |                       |
| Toronto (CYYZ) .....            | FAILS V443 DOGGS YXU V098 YWT YWT-STAR .....   |                       |
| West Chicago/Dupage (DPA) ..... | AMRST-DP VWV EON JOT .....   |                       |
| West Palm Beach (PBI) .....     | (GPS or DME/DME-IRU equipped) DJB DJB173<br>HERAK APE035 APE J83 SPA J85 TAY WLACE .....                     |                       |
|                                 | or   |                       |
|                                 | (all others) DJB DJB173 HERAK APE035 APE J83<br>SPA TAY WLACE (RNAV)-STAR .....                              |                       |
| Wilmington (ILN) .....          | DJB DJB173 HERAK APE035 APE .....  |                       |
| <b>COLUMBUS (CMH)</b>           |  |                       |
| Dallas/Fort Worth (DFW) .....   | DQN CVG PXV J131 LIT BYP .....   |                       |

| Terminals                     | Route   | Effective Times (UTC) |
|-------------------------------|---|-----------------------|
| Detroit/Wayne (DTW).....      | DJB DJB314 GEMNI GEMNI-STAR .....   |                       |
| Houston (HOU) .....           | (GPS or DME/DME-IRU equipped) LIT J180 SWB<br>ROKIT (RNAV)-STAR .....   |                       |
|                               | or<br>(Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....   |                       |
| Houston (IAH) .....           | (Turbojets-GPS or DME/DME-IRU equipped) LIT<br>J180 SWB TXMEX (RNAV)-STAR .....   |                       |
|                               | or<br>(Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....   |                       |
| La Guardia (LGA) .....        | HLG ETG MIP-STAR .....  |                       |
| Miami (MIA) .....             | J83 SPA J85 TAY J75 HITTR PIE CYY-STAR.....   |                       |
|                               | or<br>(Turbojets-GPS or DME/DME-IRU equipped) J83<br>SPA J85 TAY SSCOT (RNAV)-STAR.....   |                       |
| Newark (EWR) .....            | DJB J29 J584 SLT FQM-STAR.....  |                       |
| Washington (IAD) .....        | APE APE100 AIR280 AIR J34 SHAAR ROYIL-STAR<br>or<br>(GPS or DME/DME-IRU equipped) APE APE100<br>AIR280 AIR MGW VERNI ESL SHNON<br>(RNAV)-STAR ..... |                       |
| Washington (DCA) .....        | APE APE100 AIR280 AIR J34 SHAAR<br>WZRRD-STAR .....   |                       |
|                               | or<br>APE APE100 AIR280 AIR J34 SHAAR ELDEE<br>(RNAV)-STAR .....  |                       |
| <b>DAYTON (DAY)</b>           |   |                       |
| Atlanta (ATL) .....           | (RNAV only) IIU BWG ERLIN (RNAV)-STAR .....   |                       |
|                               | or<br>IIU BWG ROME-STAR.....  |                       |
| Boca Raton (BCT).....         | (GPS or DME/DME-IRU equipped) V47 CVG HYK<br>VXV J99 IRQ J85 TAY PRRIE (RNAV)-STAR .....  | 1100-0300             |
| Charlotte (CLT) .....         | CVG FLM JOHNS (RNAV)-STAR.....  | 0700-2300             |
| Dallas/Fort Worth (DFW) ..... | J29 PXV J131 LIT BYP.....   |                       |
| Fort Lauderdale (FLL) .....   | V47 CVG HYK VXV J43 ATL J89 HITTR PIE<br>FORTL-STAR.....  |                       |
|                               | or<br>(GPS or DME/DME-IRU equipped) V47 CVG HYK<br>VXV J43 ATL J89 OTK JINGL (RNAV)-STAR .....  |                       |
| Fort Myers (FMY).....         | V47 CVG HYK VXV J43 SZW TYNEE (RNAV)-STAR .....   |                       |
| Fort Myers (RSW) .....        | (GPS or DME/DME-IRU equipped) V47 CVG HYK<br>VXV J43 SZW TYNEE (RNAV)-STAR .....  | 1100-0300             |
| Houston (HOU) .....           | GPS or DME/DME-IRU equipped) LIT J180 SWB<br>ROKIT (RNAV)-STAR .....  |                       |
|                               | or<br>(Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....   |                       |
| Houston (IAH) .....           | (Turbojets-GPS or DME/DME-IRU equipped) LIT<br>J180 SWB TXMEX (RNAV)-STAR .....   |                       |
|                               | or<br>(Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....   |                       |
| La Guardia (LGA) .....        | J29 J146 ETG MIP-STAR .....   |                       |
| Marco Island (MKY) .....      | V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR..   |                       |
| Miami (MIA) .....             | V47 CVG HYK VXV J43 ATL SZW J43 PIE<br>CYY-STAR .....   |                       |
|                               | or<br>(Turbojets-GPS or DME/DME-IUR equipped) V47<br>CVG HYK VXV J43 ATL SZW SSCOT<br>(RNAV)-STAR.....  |                       |
| Naples (APF).....             | V47 CVG HYK VXV J43 SZW PIKKR (RNAV)-STAR..   |                       |
| Orlando Executive (ORL) ..... | V47 CVG HYK VXV J99 IRQ J85 AMG<br>LEESE-STAR .....   | 1100-0300             |
|                               | or  |                       |

| Terminals  | Route  | Effective Times (UTC) |
|--|--|-----------------------|
|  | (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG SHEMP MTATA PIGLT<br>(RNAV)-STAR ..... | 1100-0400             |
| Orlando Intl (MCO) .....                                 | V47 CVG HYK VXV J99 IRQ J85 AMG<br>LEESE-STAR .....  | 1100-0300             |
|  | or<br>(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 AMG BUGGZ (RNAV)-STAR .....          | 1100-0400             |
| Sarasota/Bradenton (SRQ) .....                           | V47 CVG HYK VXV J43 SZW CLAMP-STAR .....   |                       |
| Tampa (TPA) .....  | V47 CVG HYK VXV J43 SZW DARBS-STAR .....   |                       |
|  | or<br>(GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J43 SZW FOXXX (RNAV)-STAR .....                  |                       |
| West Palm Beach (PBI) .....                              | (GPS or DME/DME-IRU equipped) V47 CVG HYK VXV J99 IRQ J85 TAY WLACE .....                            | 1100-0300             |
|  | or<br>V47 CVG HYK VXV J99 IRQ TAY WLACE<br>(RNAV)-STAR .....   | 1100-0300             |
| <b>DETROIT METRO AREA (DTW, DET, YQG, PTK, YIP, ARB)</b> |  |                       |
| Albany (ALB) .....                                       | MOONN-DP JHW .....   |                       |
| Allentown (ABE) .....                                    | ERRTH-DP ETG .....   |                       |
| Atlanta (ATL) .....                                      | RICHMOND-DP RID IIU BWG ROME-STAR .....  |                       |
|  | or<br>(RNAV only) RICHMOND-DP RID IIU BWG ERLIN<br>(RNAV)-STAR .....                                 |                       |
| Atlantic City (ACY) .....                                | ERRTH-DP CXR EWC JST J152 HAR SIE .....  |                       |
| Baltimore (BWI) .....                                    | ACO AIR AIR111 KEMAN WESTMINSTER-STAR .....  |                       |
| Bedford (BED) .....                                      | MOONN-DP JHW J82 ALB .....   |                       |
| Binghamton (BGM) .....                                   | MOONN-DP JHW .....   |                       |
| Birmingham (BHM) .....                                   | RICHMOND-DP RID IIU .....  |                       |
| Boston (BOS) .....                                       | MOONN-DP JHW J82 ALB GARDNER-STAR .....  |                       |
| Buffalo (BUF) .....                                      | (60-170 incl) MOONN-DP BROKK DKK .....   |                       |
| Burlington (BTV) .....                                   | MOONN-DP J29 JHW LAGGS .....   |                       |
| Cancun (MMUN) .....                                      | RICHMOND-DP RID IIU .....  |                       |
| Charleston (CHS) .....                                   | ROSEWOOD-DP ROD FLM HMV .....  |                       |
| Charleston (CRW) .....                                   | ACO AIR HVQ .....  |                       |
|  | or<br>(Turboprops/Props-at or below FL210) SCORR<br>CHOOT APE HVQ .....                              |                       |
| Charlotte (CLT) .....                                    | ROSEWOOD-DP ROD FLM HMV JOHNS<br>(RNAV)-STAR .....   |                       |
| Chicago Midway (MDW) .....                               | JXN V116 LEROY GSH GSH-STAR .....  |                       |
| Cincinnati (CVG) .....                                   | FDY DEBAR-STAR .....   |                       |
| Cleveland Metro Area (CLE) (CGF) (BKL) (LNN) (LPR) ..... | MAARS HIMEZ HIMEZ-STAR .....   |                       |
| Columbus (CMH) .....                                     | SCORR CHOOT YOGGI GUNNE-STAR .....   |                       |
| Dallas/Fort Worth (DFW) .....                            | FORT WAYNE-DP FWA RBS STL RZC FSM<br>BONHAM-STAR .....   |                       |
| Denver (DEN) .....                                       | DUNKS J70 PMM J94 ONL J114 SNY<br>LANDR-STAR .....   | 1100-0359             |
| Elmira (ELM) .....                                       | MOONN-DP JHW .....   |                       |
| Ft. Lauderdale (FLL) .....                               | ROSEWOOD-DP ROD FLM VXV CRG OMN<br>GISSH-STAR .....  |                       |
|  | or<br>ROSEWOOD-DP ROD FLM VXV CRG OMN FISEL<br>(RNAV)-STAR .....                                     |                       |
| Fort Myers (FMY & RSW) .....                             | (Turbojets-GPS or DME/DME-IRU equipped)<br>ROSEWOOD-DP ROD FLM VXV AMG SHFTY<br>(RNAV)-STAR .....    |                       |
| Greensboro (GSO) .....                                   | AIR EKN ROA HENBY .....  |                       |
| Greer (GSP) .....  | ROSEWOOD-DP ROD FLM SOT V185 UNMAN .....   |                       |
| Houston (HOU) .....                                      | (GPS or DME/DME-IRU equipped) RID-DP RID<br>PXV J131 LIT J180 SWB ROKIT (RNAV)-STAR....<br>or        |                       |



| Terminals                  | Route   | Effective Times (UTC) |
|----------------------------|---|-----------------------|
|                            | (Non-advanced NAV only) RID-DP RID PXV J131<br>LIT J180 SWB DAS-STAR .....  |                       |
| Houston (IAH) .....        | CAVVS VVW ROD J29 PXV J131 LIT J180 CLUBS<br>DAS-STAR .....   |                       |
|                            | or<br>(Turbojets-GPS or DME/DME-IRU equipped)<br>RID-DP RID PXV J131 LIT J180 SWB TXMEX<br>(RNAV)-STAR .....          |                       |
|                            | or<br>(Non-advanced NAV only) RID-DP RID PXV J131<br>LIT J180 SWB DAS-STAR .....                                      |                       |
| Huntsville (HSV) .....     | RICHMOND-DP RID IIU J39 BNA .....   |                       |
| Indianapolis (IND) .....   | ANNTS DX0217 FWA071 FWA MIE V14<br>CLANG-STAR .....   |                       |
| Jacksonville (JAX) .....   | ROSEWOOD-DP ROD FLM VVX AMG ALMA-STAR ..  |                       |
| Kennedy (JFK) .....        | MOONN-DP JHW J70 LVZ LENDY-STAR .....   |                       |
| La Guardia (LGA) .....     | ERRTH-DP ETG ETG MILTON-STAR .....  |                       |
| Lexington (LEX) .....      | ROSEWOOD-DP ROD CVG CLEGG-STAR .....  |                       |
| Los Angeles (LAX) .....    | DUNKS J70 PMM OBK IOW J60 HEC J64 .....   | 1100-0300             |
| Louisville (SDF) .....     | ROSEWOOD-DP ROD CVG REDSTONE-STAR .....   |                       |
| Manchester (MHT) .....     | MOONN-DP JHW J82 ALB EEN .....  |                       |
| Memphis (MEM) .....        | RICHMOND-DP CAVVS VVW ROD PXV<br>WLDER-STAR .....   |                       |
| Miami (MIA) .....          | (RNAV only) ROSEWOOD-DP ROD FLM VVX CRG<br>OMN HILEY (RNAV)-STAR .....  |                       |
|                            | or<br>ROSEWOOD-DP ROD FLM VVX CRG OMN<br>ANNEY-STAR .....   |                       |
| Minneapolis (MSP) .....    | LAYNE DX0006 YQG341 J38 GRB EAU-STAR .....  |                       |
| Montreal (CYUL) .....      | TYCOB YQG098 J554 JHW J29 SYR ART ART040<br>J594 MSS FRANX FRANX-STAR .....   | 1100-0300             |
| Myrtle Beach (MYR) .....   | ACO AIR EKN RDU .....   |                       |
| Nashville (BNA) .....      | RICHMOND-DP RID IIU GUITR-STAR .....  |                       |
| Newark (EWR) .....         | ERRTH SLT FQM-STAR .....  |                       |
| New Orleans (MSY) .....    | RICHMOND-DP RID IIU J39 BNA MEI<br>RYTHM-STAR .....   |                       |
| Niagara Falls (IAG) .....  | MOONN-DP BROKK DKK .....  |                       |
| Norfolk (ORF) .....        | ACO AIR MOL TERKS-STAR .....  |                       |
| Norwood (OWD) .....        | MOONN-DP JHW J82 ALB GDM .....  |                       |
| Orlando Exec (ORL) .....   | CAVVS VVW ROD J43 VVX J99 IRQ J85 AMG<br>LEESE-STAR .....   |                       |
|                            | or<br>(GPS or DME/DME-IRU equipped)<br>ROSEWOOD-DP ROD J43 VVX J99 IRQ J85 AMG<br>SHEMP MTATA PIGLT (RNAV)-STAR ..... | 1100-0400             |
| Orlando Intl (MCO) .....   | ROSEWOOD-DP ROD FLM VVX AMG LEESE-STAR ..   |                       |
|                            | or<br>(GPS or DME/DME-IRU equipped)<br>ROSEWOOD-DP ROD FLM VVX AMG BUGGZ<br>(RNAV)-STAR .....                         | 1100-0400             |
| Philadelphia (PHL) .....   | ERRTH-DP CXR EWC JST BUNTS-STAR .....   |                       |
| Pittsburgh (PIT) .....     | ACO CUTTA-STAR .....  |                       |
| Portland (PWM) .....       | MOONN-DP JHW J82 ALB CAM CON CON061<br>NEETS .....  |                       |
| Pottstown (PTW) .....      | ERRTH-SID CXR EWC JST .....   |                       |
| Providence (PVD) .....     | MOONN-DP JHW J82 MEMMS J522 HNK<br>TEDDY-STAR .....   |                       |
| Raleigh/Durham (RDU) ..... | ACO AIR EKN ROA SOUTH BOSTON-STAR .....   |                       |
| Reading (RDG) .....        | ERRTH-DP ETG .....  |                       |
| Richmond (RIC) .....       | ACO AIR MOL FAK .....   |                       |
| Roanoke (ROA) .....        | ACO AIR EKN ROA .....   |                       |
|                            | or<br>(Turboprops/Props/at or below 230) SCORR<br>CHOOT APE ROA .....   |                       |
| Rochester (ROC) .....      | MOONN-DP BROKK DKK .....  |                       |

| Terminals   | Route  | Effective Times (UTC) |
|---|--|-----------------------|
| San Antonio (SAT) .....                                     | FORT WAYNE-DP FWA RBS STL RZC MLC ACT<br>MARCS-STAR .....                            |                       |
|   | or   |                       |
|   | RICHMOND-DP RID RID234/40 PXV J131 TXK<br>FZT TNV IDU MARCS-STAR .....               |                       |
| San Francisco (SFO) .....                                   | DUNKS J70 PMM J94 FMG ILA PYE .....  |                       |
| Sarasota/Bradenton (SRQ) .....                              | ROSEWOOD-DP ROD FLM VXV AMG TAY LAL .....  |                       |
| Shreveport (SHV) .....                                      | RICHMOND-DP RID RID234/40 PXV .....  |                       |
| St. Louis (STL) .....                                       | ANNTS DX0217 FWA071 FWA RBS VLA-STAR .....   |                       |
| Syracuse (SYR) .....  | MOONN-DP JHW .....   |                       |
| Tampa (TPA) .....   | ROSEWOOD-DP ROD FLM VXV AMG TAY<br>LZARD-STAR .....                                  |                       |
|   | or   |                       |
|   | (GPS or DME/DME-IRU equipped) ROD-DP ROD<br>FLM VXV AMG TAY DADES (RNAV)-STAR .....  |                       |
| Teterboro (TEB) .....                                       | MOONN-DP JHW J70 LVZ WILKES BARRE-STAR ...   |                       |
| Toronto (CYYZ) .....  | PISTN DX0020 V450 YWT V216 .....   |                       |
| Trenton (TTN) .....   | ERRTH-DP CXR EWC JST BUNTS-STAR .....  |                       |
| Washington Dulles (IAD) .....                               | J42 BKW ROYIL-STAR .....   |                       |
|   | or   |                       |
|   | J42 BKW SHNON (RNAV)-STAR .....  |                       |
|   | or   |                       |
|   | PXV IIU J8 HVQ ROYIL-STAR .....  |                       |
|   | or   |                       |
|   | PXV IIU J8 HVQ SHNON (RNAV)-STAR .....   |                       |
| Washington Natl (DCA) .....                                 | (all others) ACO AIR J34 BUCKO BUCKO-STAR ....                                       |                       |
|   | or   |                       |
|   | (GPS or DME/DME-IRU equipped) ACO AIR J34<br>BUCKO ELDEE (RNAV)-STAR .....           |                       |
| Westhampton Beach (FOK) .....                               | MOONN-DP JHW J70 STW LENDY .....   |                       |
| West Palm Beach (PBI) .....                                 | (GPS or DME/DME-IRU equipped)<br>ROSEWOOD-DP ROD FLM VXV CRG OMN<br>TUXXI-STAR ..... |                       |
|   | or   |                       |
|   | ROSEWOOD-DP ROD FLM VXV CRG OMN FRWAY<br>(RNAV)-STAR .....                           |                       |
| White Plains (HPN) .....                                    | MOONN-DP JHW ITH DNY VALRE-STAR .....  |                       |
| Wilkes-Barre (AVP) .....                                    | MOONN-DP JHW .....   |                       |
| Wilmington (ILG) .....                                      | ERRTH-DP CXR EWC JST BUNTS-STAR .....  |                       |
| Windsor Locks (BDL) .....                                   | MOONN-DP JHW J82 WILET SWEDE-STAR .....  |                       |
| Winston Salem (INT) .....                                   | AIR EKN ROA HENBY .....  |                       |
| <b>ELKHART (EKM)</b>  |  |                       |
| Cleveland Metro Area (CLE) (CGF) (BKL)<br>(LNN) (LPR) ..... | LFD CRL HIMEZ-STAR .....   |                       |
| <b>EVANSVILLE (EVV)</b>                                     |  |                       |
| Chicago O'Hare (ORD) .....                                  | (/E/G/R/J/L/Q only) HEVAN MZZ ROYKO<br>(RNAV)-STAR .....                             | 0000-2359             |
|   | or   |                       |
|   | (non-advanced RNAV only) HEVAN MZZ<br>MZZ344/33 OXI KNOX-STAR .....                  | 0000-2359             |
| <b>FLINT (FNT)</b>  |  |                       |
| Atlanta (ATL) .....   | (RNAV-only) VWV RID IIU BWG ERLIN<br>(RNAV)-STAR .....                               |                       |
|   | or   |                       |
|   | VWV RID IIU BWG ROME-STAR .....  |                       |
| Cincinnati (CVG) .....                                      | FWA DEBAR-STAR .....   |                       |
| <b>FORT WAYNE (FWA)</b>                                     |  |                       |
| Cincinnati (CVG) .....                                      | FWA DEBAR-STAR .....   |                       |
| <b>GRAND RAPIDS (GRR)</b>                                   |  |                       |
| Atlanta (ATL) .....   | IIU BWG ROME-STAR .....  |                       |
|   | or   |                       |
|   | (RNAV only) IIU BWG ERLIN (RNAV)-STAR .....  |                       |
| Cincinnati (CVG) .....                                      | FWA DEBAR-STAR .....   |                       |
| Cleveland Metro (CLE) (CGF) (BKL) (LNN)<br>(LPR) .....      | GRR HIMEZ-STAR .....   |                       |

Effective  
Times  
(UTC)

| Terminals   | Route   |           |
|---|---|-----------|
| <b>HAMILTON (CYHM)</b>                                  |   |           |
| Detroit/Wayne Area (DET, YIP, PTK,<br>CYQG) .....       | YXU PICES-STAR.....   |           |
| <b>INDIANAPOLIS (IND)</b>                               |   |           |
| Dallas/Fort Worth (DFW) .....                           | J24 STL RZC FSM BYP .....   |           |
| Houston (HOU) .....                                     | (GPS or DME/DME-IRU equipped) LIT J180 SWB<br>ROKIT (RNAV)-STAR .....           |           |
|   | or  |           |
|   | (Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....                           |           |
| Houston (IAH) .....                                     | (Turbojets-GPS or DME/DME-IRU equipped) LIT<br>J180 SWB TXMEX (RNAV)-STAR ..... |           |
|   | or  |           |
|   | (Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....                           |           |
| <b>KALAMAZOO/BATTLE CREEK (AZO)</b>                     |   |           |
| Cincinnati (CVG).....                                   | FWA DEBAR-STAR .....  |           |
| Cleveland Metro Area (CLE, CGF, BKL,<br>LNN, LPR) ..... | LFD CRL HIMEZ-STAR.....   |           |
| <b>LANSING (LAN)</b>                                    |   |           |
| Atlanta (ATL) .....                                     | (RNAV only) VWV RID IIU BWG ERLIN<br>(RNAV)-STAR .....                          |           |
|   | or  |           |
|   | VWV RID IIU BWG ROME-STAR.....  |           |
| Cincinnati (CVG).....                                   | FWA DEBAR-STAR .....  |           |
| Cleveland Metro Area (CLE, CGF, BKL,<br>LNN, LPR) ..... | SVM HIMEZ-STAR .....  |           |
| <b>LONDON (CYXU)</b>                                    |   |           |
| Detroit Metro Area (YIP, PTK, DET,<br>CYQG) .....       | YXU PICES-STAR.....   |           |
| <b>MADISON (MSN)</b>                                    |   |           |
| Cleveland Metro Area (CLE, CGF, BKL,<br>LNN, LPR) ..... | SQUIB GRR HIMEZ-STAR.....   |           |
| <b>MILWAUKEE (MKE)</b>                                  |   |           |
| Akron (CAK).....  | OBK SAMPL ADIME OTENS VWV MFD V8 DALTS ...                                      |           |
| Albany (ALB) .....                                      | SQUIB MKG ECK YXU BUF .....   |           |
| Andrews AFB (ADW) .....                                 | OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34<br>SHAAR WZRRD-STAR.....              |           |
| Baltimore (BWI) .....                                   | OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34<br>AIR KEMAN WESTMINSTER-STAR .....   |           |
| Boca Raton .....  | (GPS or DME/DME-IRU equipped) OBK J73 SZW<br>PRRIE (RNAV)-STAR .....            |           |
| Bedford (BED).....                                      | SQUIB MKG ECK YXU BUF ALB GDM V431 LOBBY  |           |
| Boston (BOS) .....                                      | SQUIB MKG ECK YXU BUF ALB GARDNER-STAR ...                                      |           |
| Buffalo (BUF) .....                                     | SQUIB MKG ECK YXU .....   |           |
| Burlington (BTV).....                                   | SQUIB MKG ECK YXU BUF SYR J29 LAGGS .....                                       |           |
| Cleveland Metro Area (CLE) .....                        | SQUIB LAN SVM HIMEZ-STAR .....  |           |
| Detroit/Wayne (DTW).....                                | BAE POLAR-STAR .....  |           |
| Detroit Metro Area (YIP) .....                          | SQUIB LAN SPRTN-STAR.....   |           |
| Flint (FNT) .....                                       | SQUIB.....  |           |
| Fort Lauderdale (FLL) .....                             | OBK J73 SZW JINGL (RNAV)-STAR.....  | 1100-0300 |
|   | or  |           |
|   | (GPS or DME/DME-IRU equipped) OBK J73 SZW<br>JINGL (RNAV)-STAR .....            | 1100-0300 |
| Fort Myers (FMY) .....                                  | OBK J73 SZW TYNEE (RNAV)-STAR.....  | 1100-0300 |
| Harrisburg (MDT).....                                   | OBK SAMPL ADIME GERBS J146 CXR EWC HAR ...                                      |           |
| Houston (HOU) .....                                     | (GPS or DME/DME-IRU equipped) LIT J180 SWB<br>ROKIT (RNAV)-STAR .....           |           |
|   | or  |           |
|   | (Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....                           |           |
| Houston (IAH) .....                                     | (Turbojets-GPS or DME/DME-IRU equipped) LIT<br>J180 SWB TXMEX (RNAV)-STAR ..... |           |
|   | or  |           |
|   | (Non-advanced NAV only) LIT J180 SWB<br>DAS-STAR.....                           |           |

| Terminals                     | Route  | Effective Times (UTC) |
|-------------------------------|--|-----------------------|
| Hyannis (HYA).....            | SQUIB MKG ECK YXU BUF ENE LFA.....   |                       |
| Jackson (JXN).....            | SQUIB.....   |                       |
| Kansas City (MCI).....        | DBQ BRAYMER-STAR.....  |                       |
| Kansas City (MKC).....        | DBQ IRK BRAYMER-STAR.....  |                       |
| Kennedy (JFK).....            | SQUIB MKG ECK J16 HANKK J522 HNK IGN<br>KINGSTON-STAR.....                                     |                       |
| La Guardia (LGA).....         | SQUIB MKG ECK YXU BUF GEE ROCKDALE-STAR ..   |                       |
| Lansing (LAN).....            | SQUIB.....   |                       |
| Mansfield (MFD).....          | OBK SAMPL ADIME OTENS VVW .....  |                       |
| Miami (MIA).....              | OBK J73 SZW J43 PIE CYY-STAR .....   | 1100-0300             |
|                               | or   |                       |
|                               | (Turbojets-GPS or DME/DME-IRU equipped) OBK<br>J73 SZW SSCOT (RNAV)-STAR .....                 | 1100-0300             |
| Montreal (CYUL).....          | SQUIB MKG ECK YYZ J594 MSS.....  |                       |
| Morristown (MMU).....         | SQUIB MKG ECK J16 HANKK IGN WEARD V489<br>COATE .....  |                       |
| Nashville (BNA).....          | OBK J73 PXV CCT HEHAW-STAR .....   |                       |
| Newark (EWR).....             | SQUIB MKG ECK J16 HANKK J522 HNK<br>SHAFF-STAR .....   |                       |
| Niagara Falls (IAG).....      | SQUIB MKG ECK YXU .....  |                       |
| Orlando Executive (ORL).....  | OBK J84 DNV TTH BWG GQO ATL J89 OTK<br>LEESE-STAR .....  |                       |
|                               | or   |                       |
|                               | (GPS or DME/DME-IRU equipped) OBK J84 DNV<br>TTH BWG GQO ATL J89 OTK PIGLT<br>(RNAV)-STAR..... | 1100-0400             |
| Orlando Intl (MCO).....       | OBK J84 DNV TTH BWG GQO ATL J89 OTK<br>LEESE-STAR .....  | 1100-0300             |
|                               | or   |                       |
|                               | (GPS or DME/DME-IRU equipped) OBK J84 DNV<br>TTH BWG GQO ATL J89 OTK PIGLT<br>(RNAV)-STAR..... | 1100-0400             |
| Philadelphia (PHL).....       | OBK SAMPL ADIME GERBS J146 CXR EWC JST<br>BUNTS-STAR.....                                      |                       |
| Pittsburgh (PIT).....         | OBK SAMPL ADIME OTENS ANEWA RIEKE DJB<br>ACO CUTTA-STAR.....                                   |                       |
| Portland (PWM).....           | SQUIB MKG ECK YXU BUF ALB CON PARSO .....  |                       |
| Pottstown (PTW).....          | SQUIB ADALE J34 CRL CXR EWC JST .....  |                       |
| Providence (PVD).....         | SQUIB MKG ECK J16 HANKK J522 HNK<br>TEDDY-STAR .....   |                       |
| Sarasota/Bradenton (SRQ)..... | OBK J73 SZW CLAMP-STAR .....   | 1100-0300             |
| Syracuse (SYR).....           | SQUIB MKG ECK YXU BUF .....  |                       |
| Tampa (TPA).....              | OBK J73 SZW DARBS-STAR .....   | 1100-0300             |
|                               | or   |                       |
|                               | (GPS or DME/DME-IRU equipped) OBK J73 SZW<br>FOXXX (RNAV)-STAR.....                            | 1100-0300             |
| Teterboro (TEB).....          | SQUIB MKG ECK J16 HANKK IGN WEARD V489<br>COATE .....  |                       |
| Toledo (TOL).....             | SQUIB PMM LFD .....  |                       |
| Toronto (CYYZ).....           | SQUIB MKG ECK V216.....  |                       |
| Washington Dulles (IAD).....  | OBK GIJ J146 J34 DJB J34 AIR MGW MGW121<br>VERNI ESL SHAAR ROYIL-STAR.....                     |                       |
|                               | or   |                       |
|                               | OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34<br>AIR MGW VERNI ESL SHNON (RNAV)-STAR.....          |                       |
| Washington Natl (DCA).....    | OBK GIJ J146 J34 DJB J34 SHAAR WZRRD-STAR ..   |                       |
|                               | or   |                       |
|                               | OBK SAMPL ADIME OTENS ANEWA RIEKE DJB J34<br>SHAAR ELDEE (RNAV)-STAR .....                     |                       |
| West Palm Beach (PBI).....    | (GPS or DME/DME-IRU equipped) OBK J73 SZW<br>WLACE.....  |                       |
| White Plains (HPN).....       | SQUIB MKG ECK J16 BUF ITH DNY VALRE-STAR ..  |                       |
| Windsor Locks (BDL).....      | SQUIB MKG ECK J16 AUDIL SWEDE-STAR.....  |                       |
| Youngstown (YNG).....         | OBK SAMPL ADIME GERBS CXR .....  |                       |

Effective  
Times  
(UTC)

| Terminals   | Route                                       |
|---|---|
| <b>MOLINE (MLI)</b>                                     |   |
| Cleveland Metro Area (CLE) (CGF) (BKL)                  |   |
| (LNN) (LPR) .....                                       | ELX CRL HIMEZ-STAR .....                    |
| Detroit/Wayne (DTW) .....                               | MKG POLAR-STAR                              |
| <b>MONTREAL (CYUL)</b>                                  |   |
| Cincinnati (CVG) .....                                  | (RNAV only) YOW J546 YSO MAULL KODIE CTW    |
|   | TIGRR (RNAV)-STAR .....                     |
|   | or  |
|   | (all others) YOW J546 YSO YYZ JHW JHW194    |
|   | MAULL SLT249 KODIE CTW081 CTW               |
|   | CINCE-STAR .....                            |
| Detroit/Wayne (DET) .....                               | YOW J546 .....                              |
| Kennedy (JFK) .....                                     | V282 J524 BUGSY J570 ALB IGN IGN-STAR ..... |
| La Guardia (LGA) .....                                  | V282 J542 BUGSY J570 ALB PWL IGN V157       |
| <b>OSHAWA (CYOO)</b>                                    |   |
| Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB) ..... | YSN YHM YXU PICES-STAR .....                |
| <b>OTTAWA (CYOW)</b>                                    |   |
| Detroit Metro Area (DTW, DET, YQG, PTK, YIP ARB) .....  | YOW J546 YSO YXU PICES-STAR .....           |
| <b>PEORIA (PIA)</b>                                     |   |
| Detroit/Wayne (DTW) .....                               | MKG POLAR-STAR .....                        |
| <b>ROCKFORD (RFD)</b>                                   |   |
| Cleveland Metro Area (CLE) (CGF) (BKL)                  |   |
| (LNN) (LPR) .....                                       | ELX CRL HIMEZ-STAR .....                    |
| <b>SAGINAW (MBS)</b>                                    |   |
| Cleveland Metro Area (CLE) (CGF) (BKL)                  |   |
| (LNN) (LPR) .....                                       | MBS V133 SVM HIMEZ-STAR .....               |
| <b>SAINT THOMAS (CYQS)</b>                              |   |
| Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB) ..... | AXXIS PICES-STAR .....                      |
| <b>SOUTH BEND (SBN)</b>                                 |   |
| Atlanta (ATL) .....                                     | (RNAV only) IIU BWG ERLIN (RNAV)-STAR ..... |
|   | or  |
|   | IIU BWG ROME-STAR .....                     |
| Cincinnati (CVG) .....                                  | FWA DEBAR-STAR .....                        |
| Cleveland Metro Area (CLE) (CGF) (BKL)                  |   |
| (LNN) (LPR) .....                                       | LFD CRL HIMEZ-STAR .....                    |
| <b>TOLEDO (TOL)</b>                                     |   |
| Atlanta (ATL) .....                                     | VWV RID IIU BWG ROME-STAR .....             |
| <b>TORONTO (CYYZ)</b>                                   |   |
| Cincinnati (CVG) .....                                  | (RNAV only) THORL JHW MAULL KODIE CTW       |
|   | TIGRR (RNAV)-STAR .....                     |
|   | or  |
|   | (all others) THORL JHW JHW194 MAULL SLT249  |
|   | KODIE CTW081 CTW CINCE-STAR .....           |
| Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB) ..... | ANCOL V104 YXU PICES-STAR .....             |
| La Guardia (LGA) .....                                  | (above 250 kts) V252 GEE RKA-STAR .....     |
|   | or  |
|   | (250 kts or less) V252 GEE V14 BEEPS J522   |
|   | EXTOL RKA292 RKA NOBB-STAR .....            |
| San Francisco (SFO) .....                               | GRB J106 GEP J70 ABR J32 FMG ILA PYE .....  |
| <b>WATERLOO (CYKF)</b>                                  |   |
| Detroit Metro Area (DTW, DET, YQG, PTK, YIP, ARB) ..... | YXU PICES-STAR .....                        |

1100-0300

# PREFERRED IFR ROUTES

## SPECIAL HIGH ALTITUDE DIRECTIONAL ROUTES

| Terminals   | Route  | Effective Times (UTC) |
|---|--|-----------------------|
| Traffic originating east of Chicago Terminating Denver:   |  |                       |
| DJB .....   | J60 IOW DSM J144 OBH J10 LBF<br>SAYGE-STAR .....   | 1300-0100             |
| BAE .....   | J16 MCW ONL J114 SNY LANDR-STAR .....  | 1300-0100             |
| STL .....   | STL J110 GCK J154 RYLIE DANDD-STAR .....   |                       |
| Traffic overflying Cleveland Center and south of SLT:   |  |                       |
| HPN .....   | (above 250 kts) SLT J190 CFB DNY280 DNY<br>VALRE-STAR .....                                  |                       |
|   | or   |                       |
|   | PSB J49 CFB220 CFB DNY280 DNY<br>VALRE-STAR .....  |                       |
|   | or   |                       |
|   | (250 kts or less) SLT J190 CFB DNY280<br>DNY NOBBI-STAR .....                                |                       |
|   | or   |                       |
|   | PSB J49 CFB220 CFB DNY280 DNY<br>NOBBI-STAR .....  |                       |
| EWR .....   | ROD J29 J584 FQM-STAR .....  | 1100-0300             |
| ROD J29 J70 LVZ LENDY-STAR .....  | 1100-0300<br>or  |                       |
| BKW J42 GVE KORRY-STAR .....  | 1100-0300  |                       |
| PHL .....   | ROD J152 HAR V210 BUNTS .....  | 1100-0300             |
|   | or   |                       |
|   | BKW J42 GVE DPNT-STAR .....  | 1100-0300             |
| PIT .....   | APE CTW V443 WISKE .....   |                       |
|   | or   |                       |
|   | HNN JPU V117 WISKE .....   |                       |
| TEB/MMU/CDW/Satellites .....  | (Non-Advanced Nav Aircraft only) ROD J29<br>JHW J70 LVZ LVZ-STAR .....                       |                       |
| Traffic overflying Badger VORTAC, BAE to Washington Dulles IAD:   |  |                       |
| BAE .....   | J34 AIR MGW MGW121 VERNI ESL<br>ROYIL-STAR .....   |                       |
|   | or   |                       |
|   | (GPS or DME/DME-IRU equipped) J34 AIR<br>MGW VERNI ESL SHNON (RNAV)-STAR .....               |                       |
| Traffic overflying Gipper VORTAC, GIJ to Washington Dulles IAD:   |  |                       |
| GIJ .....   | J146 WOOST J34 AIR MGW MGW121 VERNI<br>ESL ROYIL-STAR .....                                  |                       |
|   | or   |                       |
|   | (GPS or DME/DME-IRU equipped) J146<br>WOOST J34 AIR MGW VERNI ESL SHNON<br>(RNAV)-STAR ..... |                       |
| Traffic overflying Indianapolis Center area eastbound originating north and west of a line from DFW to JFK: |  |                       |
| ABE .....   | ROD CXR J146 .....   |                       |
| BDL .....   | ROD J29 JHW J82 WILET RKA SWEDE-STAR .....   |                       |
| BWI .....   | ROD J152 J162 MGW EMI-STAR .....   |                       |
| CEF .....   | ROD J29 JHW J82 ALB .....  |                       |
| FRG .....   | ROD J29 JHW J82 J522 HNK IGN V58 V91<br>CCC .....  |                       |
| HPN .....   | (above 250 kts) ROD J29 JHW J82 WILET<br>DNY VALRE-STAR) .....                               |                       |
|   | or   |                       |
|   | (250 kts or less) ROD J29 JHW J82 WILET<br>DNY NOBBI-STAR .....                              |                       |
| ISP .....   | (above 250 kts) ROD J152 J78 PSB J49 HNK<br>J68 V130 TOMES MAD V34 CREAM V16<br>CCC .....    |                       |
|   | or   |                       |
|   | (250 kts or less) ROD J152 J78 PSB J49<br>HNK DNY LOVES-STAR .....                           |                       |
| TEB/MMU/CDW/LDJ .....   | ROD J29 JHW J70 LVZ-STAR .....   |                       |

| Terminals   | Route   | Effective Times (UTC)   |
|---|---|-------------------------|
| Traffic overflying Indianapolis Center area eastbound originating south and east of a line from DFW to JFK:   |   |                         |
| ABE .....   | BKW LDN LDN031 V377 HAR V162 DUMMR.   |                         |
| ACY .....   | BKW J42 OTT SIE .....   |                         |
| BWI .....   | BKW J147 CSN OTT-STAR .....   |                         |
| DAA .....   | BKW J213 V143 V4 AML .....  |                         |
| DCA/ADW .....   | BKW WZRRD-STAR .....  |                         |
|   | or  |                         |
| DOV .....   | BKW ELDEE (RNAV)-STAR .....   |                         |
| HPN .....   | BKW J42 GVE ENO-STAR .....  |                         |
| IAD .....   | BKW J42 OOD J150 CYN BOUNO-STAR .....                                       | 1100-1830 and 2230-0300 |
|   | BKW ROYIL-STAR .....  |                         |
|   | or  |                         |
|   | BKW SHNON (RNAV)-STAR .....   | 1100-1830 and 2230-0300 |
|   | or  |                         |
|   | GSO J14 CREWE J51 FAK COATT-STAR .....                                      | 1830-2230               |
|   | or  |                         |
|   | GSO J14 CREWE J51 FAK BARIN (RNAV)-STAR .....                               | 1830-2230               |
| LFI .....   | BKW J42 MOL J24 HCM .....   |                         |
| NSF .....   | BKW J213 FINKS AML259 AML .....   |                         |
| PHL .....   | BKW J42 GVE DPNT-STAR .....   |                         |
| TEB/MMU/CDW/LDJ .....   | (Advanced Nav Aircraft only) BKW J42 GVE JAIKE-STAR .....                   |                         |
| WRI .....   | BKW J42 OTT SIE-STAR .....  |                         |
| Traffic overflying Indianapolis Center from Kansas City Center landing at Cleveland Metro:                    |   |                         |
| CLE .....   | (GPS or DME/DME-IRU equipped) STL J134 JUDDI CVG ABERZ-STAR .....           |                         |
| Traffic overflying Indianapolis Center from Kansas City Center landing at Detroit/Wayne:                      |   |                         |
| DTW .....   | (GPS or DME/DME-IRU equipped) PXV VHP FWA MIZAR-STAR .....                  |                         |
| Traffic overflying Indianapolis (ZID) or Cleveland (ZOB) Centers landing in the Washington Metropolitan Area: |   |                         |
| BWI .....   | MGW EMI-STAR .....  | 1100-0300               |
|   | or  |                         |
|   | BKW J147 CSN OTT-STAR .....   | 1100-0300               |
| DCA .....   | APE J30 BUCKO BUCKO-STAR .....  | 1100-0300               |
|   | or  |                         |
|   | BKW FINKS-STAR .....  | 1100-0300               |
|   | or  | 1100-0300               |
|   | (GPS or DME/DME-IRU equipped) BKW ELDEE (RNAV)-STAR .....                   | 1100-0300               |
|   | or  |                         |
|   | APE J30 SHAAR WZRRD-STAR .....  |                         |
|   | or  |                         |
|   | BKW WZRRD-STAR .....  |                         |
|   | or  |                         |
|   | APE J30 SHAAR ELDEE .....   |                         |
|   | or  |                         |
|   | BKW ELDEE (RNAV)-STAR .....   |                         |
|   | or  |                         |
| IAD .....   | APE AIR MGW MGW121 VERNI ESL ROYIL-STAR .....                               |                         |
|   | or  |                         |
|   | BKW ROYIL-STAR .....  |                         |
|   | or  |                         |
|   | HVQ ROYIL-STAR .....  |                         |
|   | or  |                         |
|   | (GPS or DME/DME-IRU equipped) APE AIR MGW VERNI ESL SHNON (RNAV)-STAR ..... |                         |
|   | or  |                         |
|   | BKW SHNON (RNAV)-STAR .....   |                         |
|   | or  |                         |
|   | HVQ SHNON (RNAV)-STAR .....   |                         |

| Terminals  | Route   | Effective Times (UTC) |
|--|---|-----------------------|
| Traffic overflying Indianapolis Center (ZID) to Chicago O'Hare (ORD) |   |                       |
| ORD .....  | (Non-Advanced Nav Aircraft only) ATL J89 IIU<br>MZZ OXI KNOX-STAR .....   |                       |
|  | or  |                       |
|  | (Non-Advanced Nav Aircraft only) BNA IIU<br>MZZ OXI KNOX-STAR .....   |                       |
|  | or  |                       |
|  | (Non-Advanced Nav Aircraft only) FLM J24<br>BIGXX MZZ OXI KNOX-STAR .....   |                       |
|  | or  |                       |
|  | (Non-Advanced Nav Aircraft only) IRQ J99 IIU<br>MZZ OXI KNOX-STAR .....   |                       |
|  | or  |                       |
|  | (Non-Advanced Nav Aircraft only,<br>Washington/Baltimore Metro Area Only:<br>BWI, DCA, IAD) ROD J149 FWA<br>KNOX-STAR ..... |                       |

## HIGH ALTITUDE—SINGLE DIRECTION ROUTES

| Airway        | Segment Fixes                           | Direction Effective | Effective Times (UTC) |
|---------------|---|---------------------|-----------------------|
| J24/110 ..... | Indianapolis, IN to St. Louis, MO ..... | West                | 1100-0300             |
| J30 .....     | Joliet, IL to TRIXY Intn, VA .....      | East                | 1100-0300             |
| J34 .....     | Bellaire, OH to TRIXY Intn, VA .....    | East                | 1100-0300             |
| J149 .....    | Armel, VA to Rosewood, OH .....         | West                | 1100-0300             |
| J162 .....    | Bellaire, OH to Martinsburg, WV .....   | East                | 1100-0300             |



## Q-ROUTES REGULATORY

**Q1, Q3, Q5, Q7, Q9 and Q11 are preferred single direction (Southbound) Q routes; flight planning Northbound not authorized.**

Q routes are RNAV routes that require the use of GNSS or DME/DME/IRU RNAV, unless otherwise indicated. Please note that this section does not apply to Q routes in the Gulf of Mexico. Gulf of Mexico Q routes are explained in the Southeast and South Central A/FD volumes. Q routes listed in this A/FD volume have at least part of one of their leg segments within this volume's area of coverage.

GNSS and DME/DME/IRU RNAV operations are authorized along Q routes at FL 180 and above. GNSS and DME/DME/IRU RNAV MEAs will only be published if above FL 180.

DME facilities that have been assessed for RNAV operations are listed below. Q routes with no DME facilities listed are limited to GNSS RNAV operations only. Those routes will have an enroute chart note "GNSS REQUIRED".

| Route      | Segment              | DME  |
|------------|----------------------|--|
| <b>Q1</b>  | ELMAA-ERAVE          | BTG, OLM, HQM, HUH, UBG  |
|            | ERAVE-EASON          | BTG, OLM, HQM, HUH, LTJ, CVO, DSD, OED, UBG, ONP, EUG                          |
|            | EASON-EBINY          | CVO, DSD, OED, BTG, UBG, ONP, EUG, LMT   |
|            | EBINY-ENVIE          | CVO, OED, EUG, LMT, RBL, ENI, ONP, FJS   |
|            | ENVIE-ETCHY          | OED, PYE, OAK, LIN, ECA, LMT, RBL, ENI, SAC, FJS                               |
| <b>Q2</b>  | ETCHY-POINT REYES    | LIN, ECA, RBL, ENI, SAC, OAK   |
|            | BOILE-HEDVI          | HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR           |
|            | HEDVI-HOBOL          | BZA, GBN, BLH, EED, PXR, IPL, TFD, DRK, TUS                                    |
|            | HOBOL-ITUCO          | TFD, GBN, BLH, PXR, TUS, CIE, SSO  |
|            | ITUCO-NEWMAN         | EWM, TFD, PXR, CIE, SSO, TUS, TCS  |
| <b>Q3</b>  | FEPOT-FAMUK          | OLM, TOU, HQM, CVO, BTG, DSD, LTJ, UBG, ONP, EUG                               |
|            | FAMUK-FRFLY          | BTG, DSD, OED, CVO, EUG, ONP, UBG, RBL, LMT                                    |
|            | FRFLY-FINER          | OED, EUG, RBL, LMT, ENI, CVO, FJS  |
|            | FINER-FOWND          | OED, PYE, ECA, LIN, OAK, ENI, RBL, LMT, SAC, FJS                               |
|            | FOWND-POINT REYES    | LIN, ECA, PYE, RBL, SAC, ENI   |
| <b>Q4</b>  | BOILE-HEDVI          | HEC, PDZ, OCN, PMD, LAX, RZS, IPL, TRM, PKE, BLH, EED, BZA, GBN, PXR           |
|            | HEDVI-SCOLE          | EED, BLH, BZA, GBN, TRM, IPL, TFD  |
|            | SCOLE-SPTFR          | EED, BLH, BZA, GBN, TRM, IPL, TFD  |
|            | SPTFR-ZEBOL          | EED, IPL, BZA, GBN, TFD, PXR, BLH  |
|            | ZEBOL-SKTR           | PXR, BLH, BZA, GBN, TFD, TUS, SSO, CIE, SVC, TCS                               |
| <b>Q5</b>  | SKTR-EL PASO         | EWM, CUS, SVC, TCS, SSO, CIE, ELP, DMN, CME                                    |
|            | HAROB-HISKU          | OLM, ONP, CVO, EUG, HQM, UBG, BTG, LTJ, DSD, HUH                               |
|            | HISKU-HARPR          | ONP, CVO, EUG, LTJ, DSD, UBG, BTG, RBL, OED, LMT, FJS, LKV                     |
|            | HARPR-HOMEG          | CVO, EUG, OED, RBL, LMT, ENI, FJS, LKV   |
|            | HOMEG-HUPTU          | SAC, PYE, LIN, OAK, ECA, LMT, RBL, ENI, OED, FJS                               |
| <b>Q7</b>  | HUPTU-STIKM          | OAK, ECA, PYE, LIN, SAC, ENI, RBL  |
|            | JINMO-JOGEN          | CVO, HQM, LTJ, UBG, BTG, ONP, IMB, EUG, OLM, DSD, YKM, PDT, SEA                |
|            | JOGEN-JUNEJ          | LTJ, IMB, UBG, EUG, CVO, RBL, LMT, FMG, DSD, LKV, OED, BTG                     |
|            | JUNEJ-JAGWA          | RBL, LMT, FMG, LIN, SAC, ECA, ENI, MOD, SWR, OAK, LKV, CZQ, AVE, SNS           |
|            | JAGWA-AVENAL         | OAK, MOD, ECA, EHF, PRB, AVE, SNS, CZQ   |
| <b>Q9</b>  | SUMMA-SMIGE          | OLM, UBG, SEA, YKM, BTG, ONP, IMB, HQM, PDT, EUG, LTJ, CVO, DSD, OED, EPH, MWH |
|            | SMIGE-SUNBE          | IMB, UBG, EUG, IMB, RBL, LMT, FMG, SAC, OED, CVO, LKV, DSD, BTG                |
|            | SUNBE-REBRG          | RBL, LMT, FMG, SAC, ECA, MVA, CZQ, OAK, EHF, PMD, LKV, LIN, MOD, AVE, OED, SWR |
|            | REBRG-DERBB          | CZQ, PMD, EHF, LAX, RZS, AVE, MOD, ECA   |
|            | PAAGE-PAWLI          | EPH, UBG, CVO, EUG, HQM, YKM, OLM, PDT, BTG, ONP, IMB, LTJ, DSD, LKV, OED, SEA |
| <b>Q11</b> | PAWLI-PITVE          | EUG, FMG, SAC, IMB, LKV, OED, DSD, RBL, LMT, CVO, REO                          |
|            | PITVE-PUSHH          | FMG, SAC, LIN, SWR, MOD, OAL, RBL, LKV, LMT, MVA, CZQ                          |
|            | PUSHH-LOS ANGELES    | SAC, ECA, FMG, LIN, OAL, MOD, EHF, LAX, PMD, PDZ, HEC, OCN, CZQ, AVE, RZS      |
| <b>Q13</b> | All segments         | None; GNSS required  |
| <b>Q15</b> | All segments         | None; GNSS required  |
| <b>Q19</b> | PLESS-NASHVILLE      | ENL, GQO, PXV, BNA, IUI, FAM, BWG, CSX   |
| <b>Q20</b> | CORONA-HONDS         | CNX, ABQ, ACH, ONM, TXO, LVS, TCC, CME   |
|            | HONDS-UNNOS          | CNX, INK, CME, TXO, TCC  |
|            | UNNOS-FUSCO          | FST, ACH, INK, CME, SJT, TXO, TCC  |
|            | FUSCO-JUNCTION       | ABI, CWK, CSI, INK, LZZ, JCT, SJT, STV, FST                                    |
|            | JONEZ-RAZORBACK      | BYP, EOS, TUL, TXK, ADM, RZC, OKM  |
| <b>Q21</b> | GUSTI-OYSTY          | AEX, DAS, MCB, LLA, BTR, LCH, HRV, LFT, LEV                                    |
| <b>Q22</b> | OYSTY-ACMES          | RQR, GCV, MCB, BTR, PCU, GPT, HRV, LEV, SJJ                                    |
|            | ACMES-CATLN          | SJJ, MGM, MCB, BFM, GPT, GCV, HRV, CEW, MVC, PCU, MEI                          |
| <b>Q23</b> | FORT SMITH-RAZORBACK | OKM, RZC, EOS, TUL   |

| Route | Segment   | DME  |
|-------|---|--|
| Q24   | LAKE CHARLES-BATON ROUGE<br>BATON ROUGE-IRUBE<br>IRUBE-PAYTN                              | AEX, DAS, LCH, MCB, LFT, BTR<br>AEX, LEV, MCB, LCH, RQR, HRV, BTR, GCV, MCB, PCU, SJI, LBY<br>GCV, MCB, JYU, PCU, MEI, HRV, CEW, SJI   |
| Q25   | MEEOW-WALNUT RIDGE<br>WALNUT RIDGE-WLSUN<br>WLSUN-POCKET CITY                             | ELD, MEM, LIT, FAM, RZC<br>MEM, STL, BWG, PXV, ENL, FAM, ARG, BNA, CSX, TTH<br>BWG, PXV, ENL, BNA, TTH   |
| Q26   | WALNUT RIDGE-DEVAC  | LIT, JKS, GQO, MEM, BNA, FAM, ARG, DYR, VUZ, RMG   |
| Q27   | FORT SMITH-ZALDA  | OKM, SGF, RZC, EOS, TUL  |
| Q28   | GRAZN-PYRMD<br>PYRMD-HAKAT<br>HAKAT-ESTEE   | EIC, LIT, ELD, OKM, TXK<br>ARG, LIT, FAM, ELD, SGF, RZC, MEM, TXK<br>ARG, LIT, FAM, SGF, MEM   |
| Q29   | ESTEE-POCKET CITY<br>HARES-MEMPHIS<br>MEMPHIS-SIDAE<br>SIDAE-POCKET CITY                  | ARG, CSX, FAM, PXV, ENL, MEM, STL, BWG, TTH, BNA<br>MEM, ARG, LIT, JAN, ELD, SQS<br>MEM, PXV, BNA, BWG, ARG, ENL<br>PXV, TTH, BWG, ENL   |
| Q30   | SIDON-VULCAN  | GLH, MEM, VUZ, JAN, JYU, MEI, MGM, SQS, RMG  |
| Q31   | DHART-JODOX<br>JODOX-MARVELL<br>MARVELL-TIIDE<br>TIIDE-POCKET CITY                        | SQS, LIT, TXK<br>SQS, LIT, ELD, MEM, ARG<br>ARG, BWG, PXV, FAM, LIT, MEM, ENL, TTH<br>BWG, PXV, ENL, TTH   |
| Q32   | EL DORADO-GAGLE<br>GAGLE-CRAMM<br>CRAMM-NASHVILLE<br>NASHVILLE-SWAPP                      | AEX, JAN, MEM, SQS, SWB, ELD, LIT, TXK<br>JAN, SQS, MEM, ARG, VUZ, BNA, LIT<br>BWG, MEM, VUZ, BNA, GQO<br>BWG, IIU, PXV, VXV, BNA, GQO   |
| Q33   | DHART-LITTLE ROCK   | AEX, ELD, LIT, TXK, SWB, ARG, MEM, SQS   |
| Q34   | LITTLE ROCK-PROWL<br>TEXARKANA-MATIE<br>MATIE-MEMPHIS<br>MEMPHIS-SWAPP                    | ELD, SGF, FAM, LIT, ARG, MEM, RZC, CSX, STL<br>LIT, SWB, TXK, BYP, EIC, ELD, SQS<br>LIT, ARG, MEM, ELD, SQS<br>BWG, ARG, MEM, MKL, SQS, PXV, BNA, GQO, IIU, VXV  |
| Q35   | KIMBERLY-NEERO<br>NEERO-WINEN<br>WINEN-CORKR<br>CORKR-DRAKE                               | LTJ, PDT, DSD, IMB, LKV, BOI, REO, BAM, SDO<br>BQU, SDO, BAM, REO, BVL, ILC, DTA, ELY, CDC, MLF, BCE<br>CDC, BCE, BLD, ILC, MLF, TBC, PGS, INW, DRK<br>TBC, BCE, BLD, DRK, PGS, FLG, GCN, INW, TFD   |
| Q36   | RAZORBACK-TWITS<br>TWITS-DEPEC<br>DEPEC-NASHVILLE<br>NASHVILLE-SWAPP                      | RZC, MEM, SGF, BUM, TUL, EOS, FAM, ARG, LIT<br>MEM, GQO, BNA, BWG, FAM, ARG, PXV, IIU<br>GQO, BWG, BNA, PXV, IIU<br>VXV, BWG, BNA, GQO, PXV, IIU   |
| Q38   | ROKIT-INCIN<br>INCIN-LAREY<br>LAREY-BESOM   | DAS, LCH, SWB, IAH, LFK, HUB, AEX<br>JAN, MCB, SWB, AEX<br>JAN, JYU, MEI, SQS, VUZ   |
| Q40   | ALEXANDRIA-DOOMS<br>DOOMS-WINAP<br>WINAP-MISLE  | AEX, SWB, LCH, JAN, HEZ, MCB<br>JAN, SQS, MEI, MCB<br>MEI, VUZ, JYU  |
| Q42   | KIRKSVILLE-STRUK<br>STRUK-DANVILLE<br><br>DANVILLE-MUNCIE<br>MUNCIE-HIDON                 | CID, IOW, UIN, LMN, IRK, BDF, STL, DEC, ENL, CSX<br>ENL, IOW, UIN, BDF, DEC, STL, CSX, SPI, TTH, BVT, JOT, VHP, OXI, ENL, OKK,<br>OBK, GIJ, FWA, GSH, IRK<br>GIJ, SPI, BDF, OBK, OKK, VHP, BVT, DEC, GSH, FWA, JOT, TTH, OXI, ROD, FLM<br>FLM, VHP, GSH, TTH, GIJ, OKK, FWA, ROD, OXI, CRL, GSH, APE, DJB, DXO, HNN,<br>AIR, HVQ, CXR, EWC<br>AIR, APE, HNN, CXR, HVQ, EWC, DJB<br>AIR, APE, DJB, CXR, HNN, EWC, SLT, CSN, JHW, ETG, PSB<br>PSB, JHW, EWC, AIR, ETG, CSN, EMI, SLT<br>EMI, SLT, CSN, EWC, PSB, ETG, SAX, RBV, HNK, HUO, SIE<br>ETG, EMI, CSN, HUO, SIE, JFK, PSB, SLT, HNK<br>JFK, EMI, PSB, SLT, HNK, SIE, RBV, SAX, HUO, CYN<br>HUO, RBV, EMI, CYN, SAX, JFK, PSB, HNK |
| Q104  | DEFUN-HEVVN<br>HEVVN-PLYER<br>PLYER-SWABE<br>SWABE-ST PETERSBURG<br>ST PETERSBURG-CYPRESS | PIE, PZD, CRG, SZW, TAY, JYU, CEW, MGM, OTK, CRG<br>PIE, ORL, OMN, SRQ, TAY, LAL, CRG, SZW, PZD<br>PIE, ORL, OMN, SRQ, TAY<br>LAL, ORL, OMN, SRQ, PHK, PIE<br>PHK, PBI, SRQ, PIE, VRB, ORL, FLL, LAL, OMN  |

| Route | Segment      | DME  |
|-------|--------------|--|
| Q106  | SMELZ-BULZI  | LAL, ORL, OMN, PHK, PIE, CRG, VRB, TAY, OTK, PZD, AMG, SZW                 |
|       | BULZI-DRABK  | AMG, PZD, TAY, CRG, SZW, MGM, OTK, JYU, CEW, SJI                           |
|       | DRABK-GADAY  | MGM, PZD, OTK, JYU, SZW, CEW, SJI  |
| Q108  | GADAY-CLAWZ  | MGM, SJI, CEW, JYU, PZD, OTK, MCN, SZW, LGC, TAY, AMG                      |
| Q110  | THNDR-JAYMC  | SRQ, VRB, PHK, PIE, LAL, VKZ, ORL, PBI                                     |
|       | JAYMC-RVERO  | VKZ, VRB, PHK, PIE, LAL, SRQ, ORL, OMN, PBI, DHP                           |
|       | RVERO-KPASA  | OMN, PIE, PBI, SRQ, ORL, LAL   |
|       | KPASA-BRUTS  | SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG                 |
|       | BRUTS-GULFR  | OMN, AMG, CRG, SZW, PIE, TAY, PZD, OTK                                     |
| Q112  | GULFR-FEONA  | TAY, MCN, PZD, CRG, OTK, SZW, AMG, MCN, ATL, MGM                           |
|       | DEFUN-HEVVN  | PIE, OTK, CRG, OMN, LAL, SZW, SRQ, ORL, VRB                                |
|       | HEVVN-INPIN  | JYU, PZD, CEW, SZW, MGM, OTK, TAY, AMG, PIE, CRG                           |
| Q116  | KPASA-BRUTS  | SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG                 |
|       | BRUTS-GULFR  | OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK                                     |
|       | GULFR-CEEYA  | MCN, AMG, PZD, OTK, SZW, TAY   |
| Q118  | KPASA-BRUTS  | SRQ, VRB, ORL, PHK, TAY, PIE, OMN, OTK, LAL, CRG, SZW, AMG                 |
|       | BRUTS-LENIE  | OMN, AMG, CRG, TAY, LAL, PZD, SZW, OTK, MCN                                |
| Q501  | VIXIS-GOPHER | ECK, FNT, APN, SSM, GRR, MBL, SAW, BAE, MNM, DLL, AUW, ODI, STE, FGT, EAU, |
|       |              | DLH, GEP, BRD, MCW, MSP, ASP, TVC, GRB, RWF                                |
| Q502  | GOPHER-SOBME | FGT, BRD, MCW, GEP, ABR, FAR, DLH, ODI, RWF, FSD                           |
|       | KENPA-GOPHER | SSM, FNT, ECK, APN, SAW, GRB, BAE, DLL, AUW, ODI, FGT, DLH, EAU, MCW,      |
| Q504  |              | MSP, MNM, ASP, TVC, GEP, RWF, BRD  |
|       | GOPHER-SOBME | FGT, DLH, ODI, MCW, ABR, FAR, MSP, GEP, RWF, FSD, BRD                      |
|       | NOTAP-CESNA  | SSM, ECK, APN, GLR, PLN, ISQ, MNM, DLL, RHI, DLH, GEP, FGT, ODI, ASP, TVC, |
| Q505  |              | SAW, GRB, BRD  |
|       | CESNA-HEMDI  | ODI, GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, DLL, BRD                      |
|       | OMAGA-RIMBE  | SSM, TVC, ASP, SAW, GRB  |
|       | RIMBE-CESNA  | SSM, RHI, DLL, DLH, GEP, FGT, TVC, SAW, GRB, BRD, ODI                      |
|       | CESNA-HEMDI  | GEP, DLH, FGT, RWF, FAR, AXN, FSD, ABR, BRD, ODI, GRB                      |

\*Denotes Critical DME Facility

**RNAV Routing Pitch and Catch Points**

The purpose of this section of the Special High Altitude Routes is to present user routing options for flight within the initial HAR Phase I expansion airspace. Users are able to fly user-preferred routes, referred to as non-restrictive routing (NRR), between specific fixes described by **pitch** (entry into) and **catch** (exit out of) fixes in the HAR airspace. Pitch points indicate an end of departure procedures, preferred IFR routings, or other established routing programs where a flight can begin a segment of NRR. The catch point indicates where a flight ends a segment of NRR and joins published arrival procedures, preferred IFR routing, or other established routing programs.

The HAR Phase I expansion airspace is defined as that airspace at and above FL 350 in fourteen of the western and southern Air Route Traffic Control Centers (ARTCCs). The airspace includes Minneapolis (ZMP), Chicago (ZAU), Kansas City (ZKC), Denver (ZDV), Salt Lake City (ZLC), Oakland (ZOA), Seattle Centers (ZSE), Los Angeles (ZLA), Albuquerque (ZAB), Fort Worth (ZFW), Memphis (ZME), and Houston (ZHU). Jacksonville (ZJX) and Miami (ZMA) are included for east-west routes only.

To develop a flight plan, select pitch and catch points based upon your desired route across the Phase I airspace. Filing requirements to pitch points, and from catch points, remain unchanged from current procedures. For the portion of the route between the pitch and catch points, non-restrictive routing is permitted.

Where pitch points for a specific airport are not identified, aircraft should file an appropriate departure procedure (DP), or any other user preferred routing prior to the NRR portion of their routing. Where catch points for a specific airport are not identified aircraft should file, after the NRR portion of their routing, an appropriate arrival procedure or other user preferred routing to their destination.

Additionally, information concerning the location and schedule of Special Use Airspace (SUA) and Air Traffic Control Assigned Airspace (ATCAA) can be found on the Web Site: <http://sua.faa.gov/sua/Welcome.do>. ATCAA refers to airspace in the high altitude structure supporting military and other special operations. Users are encouraged to file around these areas when they are scheduled to be active, thereby avoiding unplanned reroutes around them.

In conjunction with the HAR program RNAV routes have been established to provide for a systematic flow of air traffic in specific portions of the enroute flight environment. The designator for these RNAV routes begin with the letter Q, for example, Q-501. Where those routes aid in the efficient orderly management of air traffic they will be published as preferred IFR routes.



### HAR Special High Altitude Pitch (entry) Points for Nonrestrictive Routing for Airports Located Outside HAR Phase I Expansion Airspace

Westbound traffic originating outside of HAR airspace entering ZMP, ZAU, ZKC and ZME can begin non-restrictive routing over any of the following pitch points (listed from north to south):

DLH, CESNA, GEP, BAE, MKG, GRR, PMM, GSH, CADIZ, FWA, VHP, FLM, IIU, PXV, SGF, RZC, BNA, SALMS, VUZ, BOYDD, MIE.

Traffic originating outside of HAR airspace may also begin Nonrestrictive Routing upon crossing the pitch line depicted on the associated graphic.

### HAR Special High Altitude Pitch Points for Airports Located Within (below) HAR Phase I Expansion Airspace

This section lists pitch points for airports within the HAR Phase I expansion airspace.

|   |   |
|---|---|
| Albuquerque                                       | ABQ, GUP, HANOS or ZUN  |
| Austin  | ABI, FUZ, JCT, MQP, NAVYS, SJT or TNV   |
| Boca Raton, FL                                    | TBIRD KPASA Q118 LENIE<br>or<br>TBIRD KPASA Q116 CEEYA<br>or<br>TBIRD KPASA Q110 FEONA<br>or<br>TBIRD SMELZ Q106 BULZI<br>or<br>TBIRD SMELZ Q106 GADAY  |
| Burbank includes<br>Santa Monica<br>and Van Nuys  | GMN, MARKS<br>or<br>DAG LAS<br>or<br>HEC EED<br>or<br>PMD BLH   |
| Chicago Terminal Area                             | IOW, PLL275065, MVZ or BAE  |
| Dallas/Fort Worth Terminal Area                   | ABI, LBB, GTH, CDS, MRMAC, IRW, TUL, MLC, TXK<br>ELD, SWB<br>or<br>Aircraft destined the Chicago terminal area<br>Except MDW<br>EAKER MIDEE BDF BRADFORD-STAR<br>or<br>MLC J105 SGF BDF BRADFORD-STAR                             |
| Denver Terminal Area                              | PUB, DVC, DBL, RLG, EKR, LAR, MBW, CYS, BFF, HANKI, NATTI, ASHBY, BELKE, CABET, WEEDS, OR BINKE   |
| Fort Lauderdale (or)<br>Fort Lauderdale Executive | THNDR KPASA Q118 LENIE<br>or<br>THNDR KPASA Q116 CEEYA<br>or<br>THNDR KPASA Q110 FEONA<br>or<br>THNDR SMELZ Q106 GADAY<br>or<br>THNDR SMELZ Q106 BULZI  |
| Houston Bush                                      | LIT, EMG, MLC, JCT<br>or<br>Aircraft destined Atlanta Terminal Area LCH Q24 PAYTN HONIE-RNAV STAR<br>or<br>Aircraft joining J37 to the northeast, BPT GUSTI Q22 CATLN<br>or<br>Aircraft joining J42 to the northeast, ELD Q32 J42 |

|                                      |  |
|--------------------------------------|--|
| Houston Hobby                        | LIT, EMG, MLC, JCT,<br>or<br>Aircraft joining J42 to the northeast, ELD Q32 J42  |
| Jacksonville, FL                     | TAY  |
| Kansas City Terminal Area            | TIFTO, CATTS or KENTN  |
| Los Angeles, includes<br>Ontario     | GMN, RZS<br>or<br>DAG LAS<br>or<br>TRM EED<br>or<br>TRM PKE  |
| Las Vegas                            | DOBNE, MOSBI, NICLE, TRALR or ZELOT  |
| Long Beach includes<br>Orange County | GMN SNS, EHF, LANDO<br>or<br>TRM PKE<br>or<br>TRM EED  |
| Memphis                              | BNA, HAAWK, SALMS or SQS   |
| Miami Terminal Area                  | WINCO KPASA Q118 LENIE<br>or<br>WINCO KPASA Q116 CEEYA<br>or<br>WINCO KPASA Q110 FEONA<br>or<br>WINCO SMELZ Q106 GADAY<br>or<br>WINCO SMELZ Q106 BULZI |
| Milwaukee                            | GREAS  |
| Minneapolis Terminal Area*           | ONL, ABR, FAR, OBH, OVR, FOD   |
| New Orleans Terminal Area            | AEX, MEI, SQS, KAPLN   |
| Orlando Terminal Area                | WEBBS BRUTS Q118 LENIE<br>or<br>WEBBS GULFR Q116 CEEYA<br>or<br>WEBBS BULZI Q106 GADAY<br>or<br>WEBBS FEONA<br>or<br>WEBBS BULZI                       |
| Palm Beach, FL                       | TBIRD KPASA Q118 LENIE<br>or<br>TBIRD KPASA Q116 CEEYA<br>or<br>TBIRD KPASA Q110 FEONA<br>or<br>TBIRD SMELZ Q106 BULZI<br>or<br>TBIRD SMELZ Q106 GADAY |
| Palm Springs                         | TRM JOTNU BLD<br>or<br>TRM EED<br>or<br>TRM PKE  |
| Phoenix                              | CHILY, CIE, CULTS, RSK, DOVEE, GCN, MESSI, SJN, DRYHT or MOHAK   |
| Portland, OR                         | PDT, TIMEE   |

|   |  |
|---|--|
| Salt Lake City                          | HVE, DTA, MLF, BCE, OAL, MTU, BVL, OCS, TWF, DBS, BPI<br>or<br>TCH J56 CHE<br>or<br>TCH J173 EKR   |
| Saint Louis                             | VIH, MAP, MYERZ, MCM<br>or<br>HLV MCI  |
| San Antonio Terminal Area               | FUZ, SJT, MQP, ABI<br>or<br>Aircraft North of LFK, LFK<br>or<br>Aircraft South of HUB, ELA<br>or<br>Aircraft South of LFK and North of HUB LCH         |
| San Diego                               | TRM EED<br>or<br>TRM PKE<br>or<br>TRM JOTNU BLD  |
| San Francisco Bay Area                  | GALLI, INSLO, HAROL JSICA  |
| Oakland                                 | GALLI, INSLO, HAROL JSICA  |
| San Jose                                | GALLI or INSLO   |
| Seattle                                 | BLUIT  |
| Southwest Florida Airports<br>(RSW/FMY) | JOCKS KPASA Q118 LENIE<br>or<br>JOCKS KPASA Q116 CEEYA<br>or<br>JOCKS KPASA Q110 FEONA<br>or<br>JOCKS SMELZ Q106 GADAY<br>or<br>JOCKS SMELZ Q106 BULZI |
| Tampa Terminal Area                     | FEONA, BULZI<br>or<br>BRUTS Q118 LENIE<br>or<br>GULFR Q116 CEEYA<br>or<br>BULZI Q106 GADAY   |

\*MSP area departures with destinations east of 93 degrees west longitude via preferred IFR routing.

### **Catch Points for Airports Located Outside HAR Phase I Expansion Airspace**

This section lists exit points for aircraft destined to specific destinations which are outside the HAR Phase I airspace.

|                       |  |
|-----------------------|--|
| Atlanta Terminal Area | Aircraft through ZME airspace from ZKC airspace east of FAM, Pless Q19 BNA<br>or<br>Aircraft through ZME airspace from ZKC airspace west of FAM, ARG Q26 DEVA<br>or<br>MEM<br>or<br>Aircraft through ZME airspace from ZID airspace west of a line from VHP to BWG, BNA<br>or<br>Aircraft through ZME airspace from ZID airspace east of a line from VHP to BWG, BWG<br>or<br>Aircraft through ZME airspace from ZFW airspace, MEM<br>or<br>MEI HONIE (RNAV)–STAR<br>or<br>PATYN HONIE (RNAV)–STAR |
|-----------------------|--|



|                             |   |
|-----------------------------|---|
| Baltimore–Washington*       | GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA or VUZ   |
| Boston*                     | GEP, CRL, ECK, IIU, BNA or VUZ  |
| Buffalo*                    | GEP, CRL  |
| Hartford Bradley*           | GEP, CRL  |
| Canton–Akron*               | GIJ, VHP, GEP   |
| Charlotte                   | BNA, VUZ  |
| Cincinnati Terminal Area    | BNA, PXV<br>or<br>Aircraft north of SLC, JOT<br>or<br>Aircraft over or south of SLC, ENL<br>or<br>SLC or SFO departures, ENL, JOT |
| Cleveland Terminal Area*    | OBK   |
| Detroit Terminal Area       | BAE MKG POLAR–STAR<br>or<br>VHP FWA MIZAR–STAR  |
| Detroit Young               | VHP FWA<br>or<br>LAN SPRTN–STAR   |
| Indianapolis Terminal Area  | BIB, SPI, JOT   |
| Louisville                  | ENL, MEM  |
| Newark*                     | GEP, VHP, FLM, IIU, BNA, VUZ<br>or<br>IOW GIJ J554 CRL J584 SLT FQM   |
| New York Kennedy*           | GEP, VHP, FLM, IIU, BNA, VUZ<br>or<br>DBQ J94 PMM J70 LVZ LENDY–STAR  |
| New York LaGuardia*         | GIJ, GEP, VHP, BAE, FLM, IIU, BNA, VUZ  |
| Philadelphia Terminal Area* | GIJ, GEP, VHP, BAE, WHETT, BNA, VUZ   |
| Pittsburgh Terminal Area*   | VHP, GIJ, BAE, GEP  |
| Pontiac                     | LFD, LAN, VHP, FWA, GEP   |
| Providence                  | JHW, HEMDI, CESNA, GEP, GRB, TVC, ASP, VHP, IIU, BNA, VUZ   |
| Raleigh–Durham              | FLM, IIU, BNA, VUZ  |
| Toronto Terminal Area       | ECK, SVM, SSM, GEP  |
| Teterboro*                  | GEP, VHP, CRL, BNA, VUZ   |
| Washington Dulles/National* | GIJ, GEP, FLM, IIU, BAE, VHP, WHETT, BNA, VUZ   |
| White Plains*               | GEP, VHP, CRL, FLM, IIU, BNA, VUZ   |
| Willow Run*                 | LAN, LFD, VHP, FWA, GEP   |

\*Eastbound aircraft over flying ZMP center airspace entering Toronto center airspace, file direct SSM or via J63, J522, Q505, Q504, Q502, Q501

or

Entering ZAU or ZOB airspace from north of DPR J16 MCW, GEP

or

Entering ZAU or ZOB airspace from or south of DPR J16 MCW, CRL.

**Catch Points for Airports Located Within (below) HAR Phase I Expansion Airspace**

This section lists exit points for aircraft destined to airports which are below HAR Phase I airspace.

|                                 |  |
|---------------------------------|--|
| Albuquerque Terminal Area       | CURLY CURLY-STAR<br>or<br>ESPAN FRIHO-STAR<br>or<br>LAVAN LAVAN-STAR<br>or<br>FTI FRIHO-STAR<br>or<br>MIERA MIERA-STAR   |
| Austin Terminal Area            | Aircraft west of a north-south line at LFK, BLEWE<br>or<br>Aircraft east of a north-south line at LFK, IDU<br>or<br>LLO  |
| Boca Raton, FL                  | CEW DEFUN Q112 INPIN SHDAY (RNAV)-STAR<br>Aircraft through ZHU remain south of ZME and ZTL airspace<br>or<br>DEFUN Q112 INPIN SHDAY (RNAV)-STAR<br>Aircraft through ZHU remain south of ZME and ZTL airspace<br>or<br>SZW INPIN SHDAY (RNAV)-STAR  |
| Chicago Midway                  | CVA MOTIF-STAR<br>or<br>PIA MOTIF-STAR<br>or<br>DBQ CVA MOTIF-STAR<br>or<br>LMN MOTIF-STAR   |
| Chicago O'Hare Terminal Area    | GEP DLL MSN JVL JANESVILLE-STAR<br>or<br>TVC PULLMAN-STAR<br>or<br>FOD DBQ JVL JANESVILLE-STAR<br>or<br>MCW JANESVILLE-STAR<br>or<br>GCK IRK BRADFORD-STAR   |
| Dallas/Fort Worth Terminal Area | IRW, LOSZY, FSM, LIT, SQS, MLU, AEX, JUMBO, TQA, TURKI, HEATR<br>Aircraft through ZME airspace from north and west of PXV, RZC, Q23 FSM<br>or<br>Aircraft through ZME airspace from east of PXV, PXV Q25 MEEOW<br>or<br>Aircraft through ZME airspace from J6 down to, but not including J52, LIT, SQS<br>or<br>Aircraft through ZME airspace from J52 and south of J52, SQS |

|   |   |
|---|---|
| Denver Terminal Area                        | OATHE DANDD-STAR  |
|   | or  |
|   | HGO QUAIL-STAR  |
|   | or  |
|   | LOPEC-STAR  |
|   | or  |
|   | ALS LARKS-STAR  |
|   | or  |
|   | HBU POWDR-STAR  |
|   | or  |
|   | EKR TOMSN-STAR  |
|   | or  |
|   | CHE TOMSN-STAR  |
|   | or  |
|   | BFF LANDR-STAR  |
|   | or  |
|   | LBF SAYGE-STAR  |
|   | or  |
|   | HCT SAYGE-STAR  |
|   | or  |
|   | RSK LARKS-STAR  |
|   | or  |
|   | LAA QUAIL-STAR  |
|   | or  |
|   | GCK J154 RYLIE DANDD-STAR   |
|   | or  |
|   | OCS J154 ALPOE RAMMS-STAR   |
|   | or  |
|   | YANKI J114 SNY LANDR-STAR   |
|   | or  |
|   | Aircraft filed BIL or east, MBW RAMMS-STAR                            |
| Ft Lauderdale or<br>Ft Lauderdale Executive | CEW DEFUN Q104 PIE SWAGS (RNAV)-STAR                                  |
|   | Aircraft through ZHU airspace remain south ZME and ZTL<br>airspace    |
|   | or  |
| Houston Bush                                | SZW HEVVN Q104 PIE SWAGS (RNAV)-STAR                                  |
|   | CRP, CVE, LLO, LUKIY, SAT   |
|   | or  |
|   | Aircraft south and east of LLA, LLA                                   |
|   | or  |
|   | MISLE Q40 AEX   |
|   | or  |
|   | Aircraft north and east of SJI, SJI                                   |
|   | or  |
|   | Aircraft east of PXV, PXV Q31 DHART SWB                               |
|   | or  |
|   | Aircraft north and west of PXV, PROWL Q33 DHART SWB                   |
| Houston Hobby                               | CRP, ELLVR, SAT, SWB  |
|   | or  |
|   | Aircraft south and east of GIRLY, GIRLY                               |
|   | or  |
|   | Aircraft north and east of SJI, SJI                                   |
|   | or  |
|   | BESOM Q38 ROKIT ROKIT-STAR  |
|   | or  |
|   | Aircraft east of PXV, PXV Q29 HARES SWB                               |
|   | or  |
|   | Aircraft north and west of PXV, PROWL Q33 DHART SWB                   |
| Jacksonville                                | GADAY ZOOSS TAY   |
|   | Aircraft through ZHU airspace remain south of ZME and ZTL<br>airspace |
|   | or  |
|   | ZOOSS TAY   |

|                           |   |
|---------------------------|---|
| John Wayne–Orange County  | HEC, PGS, BLD<br>or<br>Aircraft south of TBC from ZAB airspace, HIPPI   |
| Kansas City Terminal Area | LMN BRAYMER–STAR<br>or<br>PWE ROBINSON–STAR<br>or<br>EMP JHAWK–STAR   |
| Las Vegas                 | DILCO, LIDAT, IGM<br>or<br>Aircraft over PGA or north of PGA KSINO<br>or<br>Aircraft south of PGA PGS LYNSY   |
| Los Angeles Terminal Area | Aircraft North of TBC, HEC, PGS<br>or<br>Aircraft South of TBC from ZAB airspace, HIPPI,<br>MESSI   |
| Miami Terminal Area       | CEW DEFUN Q104 CYY DEEDS (RNAV)–STAR<br>Aircraft through ZHU airspace remain south ZME and ZTL airspace<br>or<br>SZW HEVNV Q104 CYY DEEDS (RNAV)–STAR   |
| Minneapolis Terminal Area | Aircraft from north, west, south,<br>FAR GOPHER–STAR<br>or<br>RWF SKETR–STAR<br>or<br>ALO KASPR–STAR<br>or<br>BRD GOPHER–STAR<br>or<br>BAE EAU CLAIRE–STAR<br>or<br>FOD TWOLF–STAR  |
| Memphis Terminal Area     | ARG, BWG, FSM, PXV, LIT, RZC, SQS, VUZ, BNA, GQO, ELD   |
| Naples, FL                | CEW DEFUN Q104 PLYER PIKKR (RNAV)–STAR<br>Aircraft through ZHU AIRSPACE remain south of ZME and ZTL<br>airspace<br>or<br>SZW HEVNV Q104 PLYER PIKKR (RNAV)–STAR   |
| Nashville                 | CCT, GHM, GUITR, TINGS, VOLLS   |
| New Orleans Terminal Area | BLUEZ, GPT, LCH, MCB, TBD, FATSO  |
| Oakland                   | ILA<br>or<br>KATTS PAMMY<br>or<br>Aircraft over or south of a line ILC J16 DVC<br>REANA KATTS PAMMY<br>or<br>Aircraft from north of ILC, JOPER PAMMY<br>or<br>KATTS PAMMY<br>or<br>Aircraft over or south of ILC, REANA KATTS PAMMY |
| Orlando Terminal Area     | GADAY Q108 CLAWZ LEESE–STAR<br>Aircraft through ZHU airspace remain south of ZME/ZTL<br>airspace<br>or<br>OTK LEESE–STAR  |

|                              |   |
|------------------------------|---|
| Palm Beach, FL               | CEW DEFUN Q112 INPIN GULLO (RNAV)–STAR<br>Aircraft through ZHU airspace remain south of ZME and ZTL<br>airspace<br>or<br>SZW INPIN GULLO (RNAV)–STAR  |
| Phoenix                      | CORKR DRK<br>or<br>Aircraft from ZDV airspace,<br>GUP<br>or<br>Aircraft from ZAB airspace,<br>ZUN, MOHAK, SSO<br>or<br>VYLLA TUS  |
| Phoenix Satellites           | FLG, SSO, MOHAK<br>or<br>VYLLA, TUS   |
| Portland, OR Terminal Area   | ARNIT BONVL–STAR<br>or<br>LARNO BONVL–STAR<br>or<br>MOXEE MOXEE–STAR  |
| St. Louis Terminal Area      | SGF TRAKE–STAR<br>or<br>BUM TRAKE–STAR<br>or<br>ANX TRAKE–STAR<br>or<br>LMN IRK RIVRS–STAR<br>or<br>RBS VANDALIA–STAR   |
| Salt Lake City Terminal Area | JNC J12 HELPR SPANE–STAR<br>or<br>EKR MTU SPANE–STAR<br>or<br>BCE DTA–TCH<br>or<br>MLF DTA–TCH<br>or<br>BVL BONNEVILLE–STAR<br>or<br>BYI BEARR–STAR<br>or<br>PIH BEARR–STAR<br>or<br>DBS BRIGHAM CITY–STAR<br>or<br>JAC BRIGHAM CITY–STAR<br>or<br>BPI BRIGHAM CITY–STAR<br>or<br>OCS BRIGHAM CITY–STAR |
| San Diego Terminal Area      | EED, LAX, GBN   |
| Santa Ana                    | HEC, PGS, BLD, HIPPI  |
| San Antonio Terminal Area    | IDU, CSI, JCT, LLO, CRP, LRD<br>or<br>West of a north–south line at LFK, BLEWE<br>or<br>East of a north–south line at LFK, IDU  |

|   |   |
|---|---|
| San Francisco                             | FMG GOLDEN GATE–STAR  |
|   | or  |
|   | MVA MODESTO–STAR  |
|   | or  |
|   | ENI GOLDEN GATE–STAR  |
|   | or  |
|   | OAL MODESTO–STAR  |
| San Jose                                  | or  |
|   | South of a line ILC to DVC,<br>REANA KATTS OAL MODESTO–STAR           |
|   | FMG HYP EL NIDO–STAR  |
|   | or  |
|   | OAL HYP EL NIDO–STAR  |
|   | or  |
|   | ENI GOLDEN GATE–STAR  |
| Seattle Terminal Area                     | or  |
|   | South of a line ILC to DVC,<br>REANA KATTS KICHI CANDA EL NIDO–STAR   |
|   | Aircraft from northeast, southeast, south,<br>TEMPL GLASR–STAR        |
|   | or  |
|   | SUNED CHINS–STAR  |
|   | or  |
|   | BTG OLMYPIA–STAR  |
| Southwest Florida Airports<br>RSW and FMY | CEW DEFUN Q104 SWABE JOSFF–STAR                                       |
|   | Aircraft through ZHU airspace remain south of ZME and ZTL<br>airspace |
|   | or  |
|   | SZW HEVVN Q104 SWABE JOSFF–STAR                                       |
| Tampa Terminal Area                       | CEW DEFUN Q104 HEVVN DARBS–STAR                                       |
|   | Aircraft through ZHU airspace remain south of ZME and ZTL<br>airspace |
|   | or  |
|   | SZW DARBS–STAR  |
| Tucson                                    | DRK PXR   |
|   | or  |
|   | MOHAK GBN   |

## VISUAL FLIGHT RULES (VFR) WAYPOINTS

VFR Waypoint names consist of five letters beginning with "VP". Stand-alone VFR Waypoints are portrayed on VFR Charts using the same four-point star symbol currently used for Instrument Flight Rules (IFR) Waypoints.

VFR Waypoints collocated with Visual Checkpoints (Visual Reporting Points) are portrayed with a Visual Check Point flag. The VFR Waypoint name is shown in parentheses adjacent to the Visual Check Point name.

VFR Waypoint names are not intended to be pronounceable and shall not be used in ATC communications.

CAUTION: GPS accuracy necessitates extra vigilance for other aircraft when navigating near any fix retrieved from a GPS database.

## BALTIMORE–WASHINGTON TERMINAL AREA CHART/FLYWAY CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION                 |
|----------------|---------------------------|--------------------------|
| VPAXI          | _____                     | N38°34.57' / W076°20.38' |
| VPONX          | _____                     | N39°06.65' / W076°55.92' |
| VPOOP          | _____                     | N38°56.32' / W076°36.90' |

## BOSTON HELICOPTER CHART

|       |       |                          |
|-------|-------|--------------------------|
| VPBAY | _____ | N42°16.17' / W070°49.48' |
| VPBLT | _____ | N42°19.67' / W070°53.40' |
| VPCGS | _____ | N42°22.08' / W071°03.13' |
| VPEVS | _____ | N42°23.52' / W071°04.10' |
| VPFEN | _____ | N42°12.58' / W071°08.88' |
| VPFRE | _____ | N42°25.03' / W071°12.32' |
| VPGLV | _____ | N42°21.88' / W070°52.18' |
| VPHAM | _____ | N42°30.13' / W071°07.15' |
| VPPIK | _____ | N42°20.37' / W071°15.93' |
| VPQUA | _____ | N42°12.10' / W071°04.78' |
| VPQUB | _____ | N42°12.60' / W070°59.83' |
| VPSPF | _____ | N42°24.20' / W071°09.47' |
| VPTOB | _____ | N42°31.42' / W070°59.82' |
| VPWAN | _____ | N42°36.88' / W071°19.45' |

## BOSTON TERMINAL AREA CHART

|       |                            |                          |
|-------|----------------------------|--------------------------|
| VPCOH | Cohasset                   | N42°13.58' / W070°48.94' |
| VPCUT | Cuttyhunk Harbor           | N41°25.50' / W070°55.03' |
| VPFRA | Framingham Shopping Center | N42°18.16' / W071°23.65' |
| VPHOL | Woods Hole                 | N41°31.06' / W070°40.60' |
| VPHUL | Hull                       | N42°18.20' / W070°55.30' |
| VPLPT | Nantucket Great Point      | N41°23.41' / W070°02.78' |
| VPNED | Needham Towers             | N42°18.51' / W071°14.64' |
| VPPEA | Peabody Shopping Center    | N42°32.52' / W070°56.69' |
| VPROC | Rockingham Race Track      | N42°46.29' / W071°13.57' |
| VPSCI | Scituate                   | N42°11.89' / W070°43.69' |
| VPTPT | Nantucket Third Point      | N41°18.51' / W070°03.37' |
| VPTUC | Tuckernuck                 | N41°18.31' / W070°15.43' |
| VPWAK | Wakefield                  | N42°30.72' / W071°05.24' |
| VPWAN | Wang Towers                | N42°36.88' / W071°19.45' |

## CHARLOTTE SECTIONAL CHART

|       |               |                          |
|-------|---------------|--------------------------|
| VPATO | _____         | N34°37.37' / W076°31.47' |
| VPAVA | _____         | N34°57.00' / W077°16.50' |
| VPBFE | _____         | N32°16.38' / W080°47.50' |
| VPBRA | _____         | N36°13.75' / W076°08.08' |
| VPGCE | _____         | N36°03.90' / W076°36.42' |
| VPGHI | _____         | N35°15.30' / W075°31.25' |
| VPGIO | _____         | N35°32.50' / W076°37.33' |
| VPKJU | _____         | N35°26.58' / W076°10.22' |
| VPLMN | _____         | N34°55.43' / W077°46.42' |
| VPMAB | _____         | N34°42.20' / W077°03.50' |
| VPNPO | ISLE OF PALMS | N32°47.78' / W079°46.45' |
| VPOKY | _____         | N35°06.53' / W075°59.17' |
| VPREP | _____         | N32°33.98' / W080°21.82' |
| VPRRS | _____         | N33°25.45' / W079°07.60' |
| VPUMO | _____         | N35°35.63' / W075°28.08' |
| VPWZO | _____         | N36°00.87' / W075°40.07' |
| VPZIE | _____         | N32°01.62' / W080°53.42' |

## CHICAGO SECTIONAL CHART

WAYPOINT IDENT  
VPCOH

COLLOCATED VFR CHECKPOINT  
\_\_\_\_\_

LOCATION  
N31°49.35' / W081°51.07'

## DENVER TERMINAL AREA CHART/FLYWAY CHART

VPBEN  
VPFTG  
VPNIC

\_\_\_\_\_  
\_\_\_\_\_  
NORTH INTERCHANGE

N39°44.28' / W104°26.00'  
N39°44.35' / W104°32.75'  
N39°58.90' / W104°59.27'

## HOUSTON TERMINAL AREA CHART/FLYWAY CHART

WAYPOINT IDENT  
VPBWY  
VPDTN  
VPGLA  
VPGLB  
VPKTY  
VPPLN  
VPRSN  
VPSND  
VPSNT  
VPTNE  
VPTNW  
VPTRK

COLLOCATED VFR CHECKPOINT  
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LOCATION  
N29°46.25' / W095°09.24'  
N29°46.59' / W095°22.01'  
N30°08.32' / W095°06.62'  
N30°07.80' / W094°55.70'  
N29°47.05' / W095°44.92'  
N30°08.80' / W095°50.42'  
N29°30.00' / W095°41.00'  
N29°23.13' / W095°28.86'  
N29°49.29' / W094°53.94'  
N29°47.48' / W095°03.34'  
N29°47.06' / W095°33.81'  
N29°24.06' / W095°10.44'

## JACKSONVILLE SECTIONAL CHART

VPAFI  
VPAFY  
VPBEC  
VPCJA  
VPCKY  
VPCNY  
VPDAD  
VPDAR  
VPDFI  
VPDUT  
VPEAR  
VPEGV  
VPPFU  
VPGPE  
VPHAA  
VPHUC  
VPIWA  
VPJMY  
VPKER  
VPLEV  
VPLJA  
VPMIA  
VPTLH  
VPXZY  
VPYIW  
VPZIE

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DADE CITY  
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CLEARWATER BEACH  
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ST PETE BEACH  
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MIDWAY  
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LAKE PARKER  
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N31°49.35' / W081°51.07'  
N30°07.00' / W081°21.33'  
N29°46.25' / W081°15.10'  
N29°30.00' / W081°06.00'  
N28°46.50' / W082°34.00'  
N28°30.00' / W080°45.00'  
N28°22.57' / W082°11.25'  
N31°22.38' / W081°24.13'  
N29°00.17' / W081°20.85'  
N27°37.70' / W082°09.10'  
N27°58.67' / W082°49.83'  
N29°39.97' / W081°24.87'  
N28°57.08' / W081°00.33'  
N27°43.50' / W082°44.67'  
N30°04.02' / W083°40.02'  
N28°19.87' / W082°43.77'  
N31°48.33' / W081°25.85'  
N29°26.92' / W081°18.27'  
N28°04.00' / W081°56.00'  
N28°48.00' / W080°52.00'  
N29°00.00' / W080°51.00'  
N30°50.02' / W084°56.63'  
N30°32.70' / W083°52.22'  
N29°35.00' / W083°10.00'  
N30°42.28' / W081°27.25'  
N32°01.62' / W080°53.42'

## KANSAS CITY SECTIONAL CHART

VPAGO  
VPBEK  
VPDEN  
VPENE  
VPESSE  
VPFME  
VPGXY  
VPMBE  
VPMKE  
VPROV  
VPUTT

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N37°50.33' / W090°29.03'  
N37°15.07' / W092°30.67'  
N37°46.75' / W092°19.20'  
N37°44.75' / W091°55.78'  
N36°59.48' / W091°00.88'  
N37°41.00' / W092°38.33'  
N37°15.50' / W091°40.17'  
N37°11.08' / W090°27.92'  
N37°24.47' / W092°40.00'  
N38°01.72' / W091°12.81'  
N37°52.05' / W092°01.20'



## KANSAS CITY TERMINAL AREA CHART

## KLAMATH FALLS SECTIONAL CHART

## LOS ANGELES HELICOPTER CHART

EC, 22 OCT 2009 to 17 DEC 2009

## LOS ANGELES SECTIONAL CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION               |
|----------------|---------------------------|------------------------|
| VPCNG          | CONEJO GRADE US HWY 101   | N34°12.54'/W118°59.61' |
| VPCSU          | CSU CHANNEL ISLANDS       | N34°09.76'/W119°02.53' |
| VPFPL          | OXNARD FINANCIAL PLAZA    | N34°13.71'/W119°10.39' |
| VPSTC          | SATICOY BRIDGE            | N34°16.62'/W119°08.34' |

## LOS ANGELES TERMINAL AREA CHART/FLYWAY CHART

|       |                           |                        |
|-------|---------------------------|------------------------|
| VPCNG | CONEJO GRADE US HWY 101   | N34°12.54'/W118°59.61' |
| VPCSU | CSU CHANNEL ISLANDS       | N34°09.76'/W119°02.53' |
| VPGTY | GETTY CENTER              | N34°04.84'/W118°28.66' |
| VPLBP | BANNING PASS              | N33°56.05'/W116°59.63' |
| VPLCC | CHAFFEY COLLEGE           | N34°08.87'/W117°34.33' |
| VPLCP | CAJON PASS                | N34°18.07'/W117°27.68' |
| VPLDL | DISNEYLAND                | N33°48.72'/W117°55.13' |
| VPLDP | DANA POINT                | N33°27.62'/W117°42.87' |
| VPLDS | DODGER STADIUM            | N34°04.42'/W118°14.42' |
| VPLFX | 91/605 INTERCHANGE        | N33°52.38'/W118°06.08' |
| VPLGP | GRIFFITH PARK OBSERVATORY | N34°07.10'/W118°18.02' |
| VPLHF | 110/405 FWYS              | N33°51.42'/W118°17.10' |
| VPLHP | HUNTINGTON PIER           | N33°39.32'/W118°00.25' |
| VPLKH | KING HARBOR               | N33°50.75'/W118°23.88' |
| VPLLC | L.A. COLISEUM             | N34°00.83'/W118°17.27' |
| VPLLM | LAKE MATHEWS              | N33°50.58'/W117°26.85' |
| VPLMM | MAGIC MOUNTAIN            | N34°26.20'/W118°36.28' |
| VPLMS | MILE SQUARE PARK          | N33°43.40'/W117°56.77' |
| VPLPD | PRADO DAM                 | N33°53.40'/W117°38.48' |
| VPLPP | PACIFIC PALISADES         | N34°02.13'/W118°32.15' |
| VPLQM | QUEEN MARY                | N33°45.17'/W118°11.37' |
| VPLRB | ROSE BOWL                 | N34°09.67'/W118°10.05' |
| VPLRT | SANTA ANITA RACE TRACK    | N34°08.45'/W118°02.65' |
| VPLSA | SANTA ANA CANYON          | N33°52.03'/W117°42.68' |
| VPLSB | SANTA FE FLOOD BASIN      | N34°07.72'/W117°57.30' |
| VPLSC | STATE COLLEGE             | N33°52.97'/W117°53.13' |
| VPLSF | SAN FERNANDO RESERVOIR    | N34°17.87'/W118°29.00' |
| VPLSP | SIGNAL PEAK               | N33°36.33'/W117°48.63' |
| VPLSR | HAWTHORNE & 405 FREEWAY   | N33°53.07'/W118°21.13' |
| VPLSS | SANTA SUSANA PASS         | N34°16.00'/W118°38.43' |
| VPLTW | TUJUNGA WASH & FOOTHILL   | N34°16.40'/W118°20.30' |
| VPLVT | VINCENT THOMAS BRIDGE     | N33°44.97'/W118°16.32' |
| VPLWT | WATER TANK                | N34°10.82'/W118°46.27' |
| VPNEW | NEWHALL PASS              | N34°20.18'/W118°30.72' |
| VPSTC | SATICOY BRIDGE            | N34°16.62'/W119°08.34' |

## MIAMI SECTIONAL CHART

|       |                   |                        |
|-------|-------------------|------------------------|
| VPACH | HOLLYWOOD BEACH   | N26°00.92'/W080°06.93' |
| VPCOV | _____             | N27°57.00'/W080°46.75' |
| VPCLC | _____             | N26°27.07'/W082°00.88' |
| VPCTE | _____             | N26°09.28'/W081°20.70' |
| VPDAD | DADE CITY         | N28°22.57'/W082°11.25' |
| VPDUT | _____             | N27°37.70'/W082°09.10' |
| VPDZE | _____             | N27°19.00'/W080°44.17' |
| VPEAR | CLEARWATER BEACH  | N27°58.67'/W082°49.83' |
| VPEDY | ANDYTOWN TOLLGATE | N26°08.78'/W080°28.00' |
| VPFAH | _____             | N26°25.40'/W081°29.67' |
| VPGPE | ST PETE BEACH     | N27°43.50'/W082°44.67' |
| VPHRO | _____             | N27°05.97'/W082°12.20' |
| VPHUC | _____             | N28°19.87'/W082°43.77' |
| VPIBR | _____             | N27°12.47'/W081°40.22' |
| VPKER | LAKE PARKER       | N28°04.00'/W081°56.00' |
| VPKOE | _____             | N24°40.08'/W081°20.55' |
| VPLYY | _____             | N24°49.07'/W080°49.17' |
| VPMB0 | GULFSTREAM PARK   | N25°58.57'/W080°08.17' |
| VPOBA | PUMPING STATION   | N26°28.30'/W080°26.75' |
| VPRBI | _____             | N25°50.67'/W080°55.18' |
| VPRNL | RANGER STATION    | N25°22.92'/W080°36.58' |
| VPWMO | _____             | N27°03.00'/W080°35.00' |

## MIAMI TERMINAL AREA CHART/FLYWAY CHART

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION                 |
|----------------|---------------------------|--------------------------|
| VPACH          | HOLLYWOOD BEACH           | N26°00.92' / W080°06.93' |
| VPEDY          | ANDYTOWN TOLLGATE         | N26°08.78' / W080°28.00' |
| VPMB0          | GULFSTREAM PARK           | N25°58.57' / W080°08.17' |
| VPOBA          | PUMPING STATION           | N26°28.30' / W080°26.75' |
| VPRBI          |                           | N25°50.67' / W080°55.18' |
| VPRNL          | RANGER STATION            | N25°22.92' / W080°36.58' |

## NEW ORLEANS SECTIONAL CHART

|       |                |                          |
|-------|----------------|--------------------------|
| VPGPT |                | N30°25.95' / W089°05.62' |
| VPLIP | PHILLIPS INLET | N30°16.23' / W085°59.25' |
| VPMAI |                | N30°50.02' / W084°56.63' |
| VPMOB |                | N30°23.00' / W088°31.72' |
| VPRAM |                | N30°18.95' / W089°35.88' |
| VPRER |                | N30°13.87' / W085°20.67' |
| VPRIV |                | N30°54.85' / W087°57.82' |
| VPSAW |                | N30°49.65' / W089°07.42' |
| VPTHR |                | N30°19.93' / W087°08.50' |

## NEW YORK HELICOPTER CHART

|       |  |                          |
|-------|--|--------------------------|
| VPJAY |  | N40°59.00' / W073°07.00' |
| VPLYD |  | N40°57.37' / W073°29.59' |
| VPROK |  | N40°52.70' / W073°44.24' |

## PHOENIX TERMINAL AREA CHART/FLYWAY CHART

|       |                           |                          |
|-------|---------------------------|--------------------------|
| VPALL | ALLENVILLE                | N33°20.97' / W112°35.20' |
| VPAQU | AQUEDUCT PUMPING STATION  | N33°40.05' / W112°41.38' |
| VPARM | ARROWHEAD MALL            | N33°38.52' / W112°13.48' |
| VPAWG | AHWATUKEE GOLF COURSE     | N33°19.98' / W111°59.08' |
| VPAZM | ARIZONA MILLS             | N33°23.43' / W111°57.88' |
| VPBAR | BARTLETT DAM              | N33°49.10' / W111°37.92' |
| VPCCC | COUNTRY CLUB & CANAL      | N33°30.73' / W111°50.37' |
| VPCNL | CANAL                     | N33°33.23' / W111°46.89° |
| VPFRB | FIREBIRD LAKE             | N33°16.35' / W111°58.10' |
| VPFTN | FOUNTAIN HILLS            | N33°36.12' / W111°42.72' |
| VPGLX | GILA CROSSING             | N33°16.55' / W112°10.08' |
| VPGPP | GLENDALE POWER PLANT      | N33°33.27' / W112°13.00' |
| VPMAR | MARICOPA                  | N33°03.42' / W112°02.88' |
| VPMHS | MESQUITE HIGH SCHOOL      | N33°20.53' / W111°49.58' |
| VPNRV | NEW RIVER                 | N33°55.08' / W112°08.45' |
| VPNTT | NORTH TEST TRACK          | N33°03.50' / W111°55.83' |
| VPIIR | PIR                       | N33°22.52' / W112°18.90' |
| VPQTR | QUINTERO GOLF COURSE      | N33°49.53' / W112°23.58' |
| VPRVC | RIO VERDE COMMUNITY       | N33°44.37' / W111°39.62' |
| VPSMC | SOUTH MOUNTAIN COLLEGE    | N33°23.02' / W112°02.12' |
| VPSQP | SQUAW PEAK                | N33°32.83' / W112°01.27' |
| VPSSS | SUPERSTITION SPRINGS MALL | N33°23.50' / W111°41.37' |
| VPSTN | SANTAN MOUNTAINS          | N33°09.23' / W111°40.92' |
| VPSTT | SOUTH TEST TRACK          | N32°56.25' / W111°59.67' |
| VPZZZ |                           | N33°20.18' / W111°26.53' |

## ST LOUIS TERMINAL AREA CHART/FLYWAY CHART

|       |                           |                          |
|-------|---------------------------|--------------------------|
| VPAGN | TV ANTENNA                | N38°32.08' / W090°22.42' |
| VPBPE |                           | N38°23.80' / W090°20.38' |
| VPCJY | HOLIDAY SHORES            | N38°55.00' / W089°56.00' |
| VPCOJ | WINFIELD DAM              | N39°00.28' / W090°41.23' |
| VPDFA | JEFFERSON BARRACKS BRIDGE | N38°29.18' / W090°16.47' |
| VPEAZ | BUSCH STADIUM             | N38°37.43' / W090°11.55' |
| VPEDZ | WATER TANKS               | N38°45.30' / W090°34.87' |
| VPEGR | GAS TANKS                 | N38°35.80' / W090°19.32' |
| VPEOX | ST PETERS                 | N38°47.17' / W090°39.25' |

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION               |
|----------------|---------------------------|------------------------|
| VPFAI          | HOWELL ISLAND             | N38°40.00'/W090°43.00' |
| VPFFY          |                           | N38°55.37'/W090°17.30' |
| VPGPF          |                           | N38°35.60'/W090°26.92' |
| VPGVI          |                           | N38°32.30'/W090°27.80' |
| VPHRQ          | CHAIN OF ROCKS BRIDGE     | N38°45.88'/W090°10.42' |
| VPIBO          | WATERLOO                  | N38°20.00'/W090°09.00' |
| VPJMU          | HORSESHOE LAKE            | N38°41.00'/W090°05.00' |
| VPKNY          | PACIFIC                   | N38°29.00'/W090°44.00' |
| VPLES          | ST CHARLES                | N38°47.00'/W090°30.00' |
| VPLIW          | SIX FLAGS                 | N38°30.67'/W090°40.47' |
| VPLXU          | GATEWAY ARCH              | N38°37.50'/W090°11.00' |
| VPNSY          | WOOD RIVER REFINERIES     | N38°50.00'/W090°05.00' |
| VPNZY          | WENTZVILLE                | N38°48.83'/W090°50.98' |
| VPRAZ          | JERSEYVILLE               | N39°07.00'/W090°20.00' |
| VPRMO          | FOREST PARK               | N38°38.00'/W090°17.00' |
| VPWKO          | COLUMBIA                  | N38°27.00'/W090°12.00' |
| VPXXI          | MILLSTADT                 | N38°27.50'/W090°05.68' |
| VPYID          | MOSENTHEIN ISLAND         | N38°43.00'/W090°12.25' |

### SALT LAKE CITY HELICOPTER CHART

|       |                       |                        |
|-------|-----------------------|------------------------|
| VPAIR | SALTAIR               | N40°44.85'/W112°11.22' |
| VPBEE | SOUTH INTERCHANGE     | N40°38.18'/W111°54.23' |
| VPBRN | BARN                  | N40°54.28'/W112°10.15' |
| VPCAP | STATE CAPITOL         | N40°46.67'/W111°53.25' |
| VPCHS |                       | N40°42.28'/W112°05.92' |
| VPCOP | BINGHAM COPPER MINE   | N40°31.38'/W112°09.00' |
| VPCWY | CAUSEWAY              | N41°05.37'/W112°07.17' |
| VPCYN | PARLEYS CANYON        | N40°42.67'/W111°48.10' |
| VPFPC | FREE PORT CENTER      | N41°05.92'/W112°02.27' |
| VPFPK | FRANCIS PEAK          | N41°01.98'/W111°50.30' |
| VPGFS | GARFIELD STACK        | N40°43.28'/W112°11.88' |
| VPHVE | SPAGHETTI BOWL        | N40°43.50'/W111°54.22' |
| VPJRT | JORDAN RIVER TEMPLE   | N40°35.02'/W111°55.58' |
| VPKSL | KSL ANTENNA           | N40°46.80'/W112°05.80' |
| VPLGN | LAGOON AMUSEMENT PARK | N40°59.08'/W111°53.57' |
| VPMDH | MCKAY DEE HOSPITAL    | N41°11.50'/W111°57.08' |
| VPMMT | MICROWAVE TOWERS      | N40°48.50'/W111°53.37' |
| VPMSH |                       | N41°01.67'/W112°02.47' |
| VPNSL |                       | N40°50.15'/W111°54.90' |
| VPNTF |                       | N41°03.57'/W112°14.23' |
| VPOGE | GRAIN ELEVATOR        | N41°13.13'/W112°00.45' |
| VPOPS | POWER STATION         | N41°20.38'/W112°02.78' |
| VPPEN | STATE PRISON          | N40°29.88'/W111°53.62' |
| VPPPT | PROMONTORY POINT      | N41°12.28'/W112°25.73' |
| VPPTM | POINT OF THE MOUNTAIN | N40°27.42'/W111°54.83' |
| VPVPO | PROVO CANYON          | N40°18.77'/W111°39.45' |
| VPRWY |                       | N40°48.48'/W112°00.33' |
| VPSLC | I-15/I-80 INTERCHANGE | N40°45.83'/W111°54.85' |
| VPTIP | SOUTH TIP             | N40°50.93'/W112°10.92' |
| VPWBR | WEBER CANYON          | N41°08.17'/W111°54.83' |
| VPWBT |                       | N40°38.00'/W112°03.33' |

### SALT LAKE CITY TERMINAL AREA CHART/FLYWAY CHART

|       |                         |                        |
|-------|-------------------------|------------------------|
| VPAIR | SALTAIR                 | N40°44.85'/W112°11.22' |
| VPBEE | SOUTH INTERCHANGE       | N40°38.18'/W111°54.23' |
| VPBRN | BARN                    | N40°54.28'/W112°10.15' |
| VPCAP | STATE CAPITOL           | N40°46.67'/W111°53.25' |
| VPCHS |                         | N40°42.28'/W112°05.92' |
| VPCOP | BINGHAM COPPER MINE     | N40°31.38'/W112°09.00' |
| VPVCI | CENTERVILLE INTERCHANGE | N40°55.30'/W111°53.43' |
| VPCWY | CAUSEWAY                | N41°05.37'/W112°07.17' |
| VPCYN | PARLEYS CANYON          | N40°42.67'/W111°48.10' |
| VPFPC | FREE PORT CENTER        | N41°05.92'/W112°02.27' |
| VPFPK | FRANCIS PEAK            | N41°01.98'/W111°50.30' |
| VPGFS | GARFIELD STACK          | N40°43.28'/W112°11.88' |

| WAYPOINT IDENT | COLLOCATED VFR CHECKPOINT | LOCATION               |
|----------------|---------------------------|------------------------|
| VPHVE          | SPAGHETTI BOWL            | N40°43.50'/W111°54.22' |
| VPJRT          | JORDAN RIVER TEMPLE       | N40°35.02'/W111°55.58' |
| VPKSL          | KSL ANTENNA               | N40°46.80'/W112°05.80' |
| VPLGN          | LAGOON AMUSEMENT PARK     | N40°59.08'/W111°53.57' |
| VPMDH          | MCKAY DEE HOSPITAL        | N41°11.50'/W111°57.08' |
| VPMMT          | MICROWAVE TOWERS          | N40°48.50'/W111°53.37' |
| VPMSH          | _____                     | N41°01.67'/W112°02.47' |
| VPNSL          | _____                     | N40°50.15'/W111°54.90' |
| VPNTPE         | _____                     | N41°03.57'/W112°14.23' |
| VPOGE          | GRAIN ELEVATOR            | N41°13.13'/W112°00.45' |
| VPOPS          | POWER STATION             | N41°20.38'/W112°02.78' |
| VPPEP          | STATE PRISON              | N40°29.88'/W111°53.62' |
| VPPTT          | PROMONTORY POINT          | N41°12.28'/W112°25.73' |
| VPPTM          | POINT OF THE MOUNTAIN     | N40°27.42'/W111°54.83' |
| VPPOV          | PROVO CANYON              | N40°18.77'/W111°39.45' |
| VPRWY          | _____                     | N40°48.48'/W112°00.33' |
| VPSLC          | I-15/I-80 INTERCHANGE     | N40°45.83'/W111°54.85' |
| VPITP          | SOUTH TIP                 | N40°50.93'/W112°10.92' |
| VPUOU          | U OF U EVENTS CENTER      | N40°45.73'/W111°50.28' |
| VPWBR          | WEBER CANYON              | N41°08.17'/W111°54.83' |
| VPWBT          | _____                     | N40°38.00'/W112°03.33' |
| VPZOO          | HOGLE ZOO                 | N40°45.00'/W111°48.95' |

### SAN DIEGO TERMINAL AREA CHART/FLYWAY CHART

|       |                          |                        |
|-------|--------------------------|------------------------|
| VPLDP | DANA POINT               | N33°27.62'/W117°42.87' |
| VPLSP | SIGNAL PEAK              | N33°36.33'/W117°48.63' |
| VPOCN | _____                    | N33°14.15'/W117°26.63' |
| VPSBC | BARONA CASINO            | N32°56.25'/W116°52.60' |
| VPSBL | _____                    | N33°05.18'/W117°18.55' |
| VPSBM | BLACK MOUNTAIN           | N32°58.87'/W117°07.00' |
| VPSCF | _____                    | N32°48.55'/W117°09.17' |
| VPSCM | COWLES MOUNTAIN          | N32°48.72'/W117°01.97' |
| VPSCP | CRYSTAL PIER             | N32°47.77'/W117°15.42' |
| VPSCR | _____                    | N32°39.37'/W117°07.30' |
| VPSFB | IRON MOUNTAIN            | N32°58.25'/W116°57.33' |
| VPSLJ | LAKE JENNINGS            | N32°51.53'/W116°53.28' |
| VPSMB | _____                    | N32°45.57'/W117°12.22' |
| VPSMP | _____                    | N33°22.70'/W117°36.75' |
| VPSMS | MOUNT SOLEDAD            | N32°50.40'/W117°15.10' |
| VPSMV | _____                    | N32°45.75'/W117°09.80' |
| VPSMW | MOUNT WOODSON            | N33°00.52'/W116°58.23' |
| VPSOP | OTAY MESA PRISON         | N32°35.82'/W116°55.28' |
| VPSOT | LOWER OTAY LAKE          | N32°37.73'/W116°55.38' |
| VPSPL | SOUTH POINT LOMA         | N32°39.90'/W117°14.55' |
| VPSPP | POWER PLANT              | N33°08.25'/W117°20.23' |
| VPSQS | QUALCOMM STADIUM         | N32°46.98'/W117°07.23' |
| VPSRT | DEL MAR RACE TRACK       | N32°58.58'/W117°15.95' |
| VPSSM | SAN MIGUEL MOUNTAIN      | N32°41.78'/W116°56.18' |
| VPSSV | SAN VICENTE ISLAND       | N32°55.53'/W116°55.00' |
| VPSTP | TORREY PINES GOLF COURSE | N32°54.17'/W117°14.68' |
| VPSVA | _____                    | N33°11.48'/W117°16.38' |

### SAN FRANCISCO SECTIONAL CHART

|       |                 |                        |
|-------|-----------------|------------------------|
| VPKBG | KINGSBURY GRADE | N38°58.75'/W119°53.20' |
|-------|-----------------|------------------------|

### SAN FRANCISCO TERMINAL AREA CHART/FLYWAY CHART

|       |                          |                        |
|-------|--------------------------|------------------------|
| VPALT | ALTAMONT PASS            | N37°44.35'/W121°35.42' |
| VPANT | ANTIOCH BRIDGE           | N38°01.45'/W121°45.02' |
| VPBBR | BENICIA BRIDGE           | N38°02.50'/W122°07.45' |
| VPCL  | CALAVERAS RESERVOIR      | N37°28.16'/W121°48.93' |
| VPCBT | LAKE CHABOT              | N37°43.68'/W122°06.94' |
| VPCOY | COYOTE HILLS             | N37°32.50'/W122°05.06' |
| VPCQZ | CARQUINEZ BRIDGE         | N38°03.66'/W122°13.52' |
| VPCRL | _____                    | N37°11.00'/W121°41.06' |
| VPCRY | CRYSTAL SPRINGS CAUSEWAY | N37°30.56'/W122°21.10' |

## WAYPOINT IDENT

VPCSH  
VPDAM  
VPDLR  
VPDUB  
VPEMB  
VPGGF  
VPGIL  
VPHHH  
VPKGO  
VPLEX  
VPMID  
VPMOR  
VPMUM  
VPPAC  
VPPRU  
VPSAR  
VPSLA  
VPSTB  
VPSUN  
VPUTC  
VPWAL  
VPWAM  
VPWFR

## COLLOCATED VFR CHECKPOINT

CAL STATE UNIVERSITY  
DEL VALLE DAM  
  
DUBLIN  
EMBASSY SUITES  
GOLDEN GATE FIELDS  
GILROY  
HAMILTON  
KGO  
LEXINGTON RESERVOIR  
MID-SPAN SAN MATEO BRIDGE  
MORMON TEMPLE  
NUMMI PLANT  
  
PRUNEYARD  
SARATOGA  
SLAC/LINEAR ACCELERATOR  
STINSON BEACH  
SUNOL GOLF COURSE  
U.T.C.  
WALNUT CREEK  
  
CEMENT PLANT

## LOCATION

N37°39.52'/W122°03.52'  
N37°36.91'/W121°44.78'  
N37°07.00'/W121°47.06'  
N37°42.06'/W121°55.36'  
N37°26.05'/W121°53.83'  
N37°53.07'/W122°18.71'  
N37°01.37'/W121°33.99'  
N38°03.58'/W122°30.66'  
N37°31.58'/W122°06.10'  
N37°11.66'/W121°59.18'  
N37°36.28'/W122°11.81'  
N37°48.46'/W122°11.95'  
N37°29.56'/W121°56.58'  
N37°38.00'/W122°32.07'  
N37°17.33'/W121°56.01'  
N37°15.26'/W122°02.33'  
N37°24.75'/W122°14.35'  
N37°54.45'/W122°40.41'  
N37°34.85'/W121°53.23'  
N37°13.93'/W121°41.35'  
N37°53.78'/W122°04.30'  
N37°30.28'/W122°10.00'  
N37°30.88'/W122°12.26'

## TAMPA/ORLANDO TERMINAL AREA CHART/FLYWAY CHART

VPBOV  
VPCNY  
VPDAD  
VPDFI  
VPDUT  
VPEAR  
VPFFU  
VPGPE  
VPHUC  
VPKER  
VPLEV  
VPLJA

DADE CITY

CLEARWATER BEACH

ST PETE BEACH

LAKE PARKER

N27°57.00'/W080°46.75'  
N28°30.00'/W080°45.00'  
N28°22.57'/W082°11.25'  
N29°00.17'/W081°20.85'  
N27°37.70'/W082°09.10'  
N27°58.67'/W082°49.83'  
N28°57.08'/W081°00.33'  
N27°43.50'/W082°44.67'  
N28°19.87'/W082°43.77'  
N28°04.00'/W081°56.00'  
N28°48.00'/W080°52.00'  
N29°00.00'/W080°51.00'

## WASHINGTON SECTIONAL CHART

VPACE  
VPAXI  
VPBRA  
VPGCE  
VPWZO

N38°07.82'/W076°48.75'  
N38°34.57'/W076°20.38'  
N36°13.75'/W076°08.08'  
N36°03.90'/W076°36.42'  
N36°00.87'/W075°40.07'

# VOR RECEIVER CHECK VOR RECEIVER CHECKPOINTS AND VOR TEST FACILITIES (VOT)

399

The use of VOR airborne and ground checkpoints is explained in Aeronautical Information Manual, Basic Flight Information and ATC Procedures.

NOTE: Under columns headed "Type of Checkpoint" & "Type of VOT Facility" G stands for ground. A/ stands for airborne followed by figures (2300) or (1000-3000) indicating the altitudes above mean sea level at which the check should be conducted. Facilities are listed in alphabetical order, in the state where the checkpoints or VOTs are located.

## ILLINOIS

### VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name)                                 | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description                         |
|---|------------|--|--------------------------------|-------------------------------|--|
| <b>Centralia</b> (Centralia Muni) .....                   | 115.0/ENL  | A/2000                                 | 027                            | 6.1                           | Over apch end Rwy 36.                          |
| <b>Champaign</b> (Urbana) .....                           | 110.0/CMI  | A/2000                                 | 177                            | 7.8                           | Over grain elevator at Pesotum.                |
| <b>Champaign</b> (University of Illinois-Willard) ...     | 110.0/CMI  | G                                      | 332                            | 0.9                           | On runup pad Rwy 14L.                          |
| <b>Decatur</b> (Decatur) .....                            | 117.2/DEC  | A/1700                                 | 348                            | 5.4                           | Over apch end Rwy 36.                          |
| <b>Galesburg</b> .....                                    | 109.8/GBG  | A/3000                                 | 237                            | 12                            | Over railroad bridge.                          |
| <b>Jacksonville</b> .....                                 | 108.6/IJX  | A/1600                                 | 137                            | 11.1                          | Over railroad crossing 2 NM NW of Franklin.    |
| <b>Joliet</b> (Aurora Muni) .....                         | 112.3/JOT  | A/2500                                 | 331                            | 15                            | Over intersection of rwsy.                     |
| <b>Joliet</b> (Joliet Rgnl) .....                         | 112.3/JOT  | A/1500                                 | 102                            | 6.5                           | Over centerline of NW end of Rwy 04-22.        |
| <b>Lawrenceville</b> (Lawrenceville-Vincennes Intl) ..... | 108.8/LWV  | G                                      | 177                            | .6                            | South side of Echo.                            |
| <b>Marion</b> (Williamson Co Rgnl) .....                  | 110.4/MWA  | A/1500                                 | 287                            | 11                            | Railroad intersection in town of De Soto.      |
|   | 110.4/MWA  | G                                      | 139                            | .5                            | On parallel twy to Rwy 29.                     |
| <b>Mattoon/Charleston</b> (Coles Co Memorial) ...         | 109.4/MT0  | G                                      | 066                            | 7                             | Runup pad Rwy 24. VOR checkpoint unusable.     |
| <b>Moline</b> (Quad City Intl) .....                      | 114.4/MZV  | A/2000                                 | 034                            | 9.8                           | Over intersection of Rwsy 05-23, 09-27, 13-31. |
| <b>Mount Vernon</b> (Mount Vernon) .....                  | 113.8/VNN  | G                                      | 223                            | 3.2                           | At intersection of taxiways B and B2.          |
| <b>Peoria</b> (Greater Peoria Rgnl) .....                 | 115.2/PIA  | A/2000                                 | 100                            | 4.9                           | Over intersection Rwsy 13-31 and 4-22.         |
| <b>Quincy</b> (Quincy Rgnl-Baldwin Fld) .....             | 113.6/UIN  | G                                      | 029                            | 6.6                           | On W side of terminal ramp.                    |
| <b>Roberts</b> .....                                      | 116.8/RBS  | A/2000                                 | 151                            | 7.8                           | Over grain elevator in Paxton, IL.             |
| <b>Rockford</b> (Chicago/Rockford Intl) .....             | 110.8/RFD  | G                                      | 108                            | 5.1                           | Over intersection of twys A/B/D.               |
| <b>Samsville</b> (Mount Carmel Muni) .....                | 116.6/SAM  | A/1500                                 | 063                            | 18.4                          | Over intersection of Rwsy 04-22 and 13-31.     |
| <b>Troy</b> (St Louis Rgnl) .....                         | 116.0/TOY  | A/1600                                 | 322                            | 11                            | Over intersection of N/S and NW/SE rwsy.       |
| <b>Vandalia</b> (Vandalia Muni) .....                     | 114.3/VLA  | A/1700                                 | 177                            | 5.8                           | Over centerline at N end N/S rwy.              |

### VOR TEST FACILITIES (VOT)

| Facility Name<br>(Airport Name) | Freq. | Type VOT<br>Facility | Remarks |
|---------------------------------|-------|----------------------|---------|
| <b>Chicago</b> (Midway) .....   | 111.0 | G                    |         |
| <b>Chicago</b> (O'Hare) .....   | 112.0 | G                    |         |

## VOR RECEIVER CHECK INDIANA

### VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name)                     | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description                     |
|---|------------|--|--------------------------------|-------------------------------|--|
| <b>Boiler</b> (Purdue Univ) .....             | 115.1/BVT  | A/1800                                 | 286                            | 12                            | Over water twr in town of Fowler.          |
| <b>Goshen</b> (Goshen Muni) .....             | 113.7/GSH  | A/2000                                 | 090                            | 10.7                          | Over center of E/W rwy.                    |
| <b>Hoosier</b> (Monroe County) .....          | 110.2/OOM  | G                                      | 349                            | .9                            | On runup pad Rwy 17.                       |
| <b>Huntingburg</b> .....                      | 109.2/HNB  | A/2500                                 | 010                            | 8                             | Over water tower S edge Jasper.            |
| <b>Kokomo</b> (Kokomo Muni) .....             | 113.5/OKK  | G                                      | 242                            | .6                            | On taxiway A at AER 05.                    |
| <b>Marion</b> (Marion Muni) .....             | 108.6/MZZ  | G                                      | 206                            | .6                            | Runup Pad Rwy 04                           |
| <b>Muncie</b> (Delaware Co-Johnson Fld) ..... | 114.4/MIE  | A/2500                                 | 181                            | 5.8                           | Over intersection of highway and railroad. |
|   | 114.4/MIE  | G                                      | 328                            | 0.7                           | On taxiway A-4 on runup area for Rwy 14.   |
| <b>Pocket City</b> (Evansville Rgnl) .....    | 113.3/PXV  | A/2000                                 | 056                            | 13                            | Over intersection of E/W and NE/SW rws.    |
| <b>Terre Haute</b> (Sky King) .....           | 115.3/TTH  | A/2000                                 | 300                            | 7                             | Over intersection of E/W and N/S rws.      |

### VOR TEST FACILITIES (VOT)

| Facility Name<br>(Airport Name) | Freq. | Type VOT<br>Facility | Remarks |
|---------------------------------|-------|----------------------|---------|
| <b>Fort Wayne Intl</b> .....    | 111.0 | G                    |         |
| <b>Indianapolis Intl</b> .....  | 109.6 | G                    |         |

## MICHIGAN

### VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name)                         | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description   |
|---|------------|--|--------------------------------|-------------------------------|--|
| <b>Alpena</b> (Alpena Co Rgnl) .....              | 108.8/APN  | G                                      | 203                            | 1.1                           | On runup for Rwy 01.   |
| <b>Au Sable</b> (Oscoda-Wurtsmith) .....          | 116.1/ASP  | G                                      | 249                            | .9                            | Approach end Rwy 6.  |
|   | 116.1/ASP  | G                                      | 063                            | 1.0                           | Approach end Rwy 24.   |
| <b>Battle Creek</b> (W.K. Kellogg) .....          | 109.4/BTL  | A/2000                                 | 096                            | 11.3                          | NS and EW highway intersection.                                |
| <b>Escanaba</b> .....                             | 110.8/ESC  | A/2500                                 | 002                            | 14.5                          | Over microwave twr 1 NM S of Perkins.                          |
| <b>Gaylord</b> (Gaylord Rgnl) .....               | 109.2/GLR  | G                                      | 077                            | .6                            | SE corner of ramp.   |
| <b>Grand Rapids</b> (Gerald R Ford Intl) .....    | 115.95/GRR | A/2500                                 | 231                            | 10                            | Over intersection of N/S highway & E/W road 1 NM W of Wayland. |
| <b>Houghton</b> (Houghton Co Meml) .....          | 112.8/CMX  | A/2300                                 | 077                            | 13.5                          | Over smoke stack.  |
| <b>Kalamazoo</b> (Kalamazoo/Battle Creek Intl) .. | 109.0/AZO  | G                                      | 167                            | .7                            | On twy to Rwy 35.  |
| <b>Lansing</b> (Capital City) .....               | 110.8/LAN  | G                                      | 058                            | 5.4                           | On Twy C; 500 E of apch end Rwy 06.                            |
| <b>Litchfield</b> .....                           | 111.2/LFD  | A/2000                                 | 328                            | 17.5                          | Over intersection of NS/EW expressway.                         |
| <b>Manistique</b> (Schoolcraft County) .....      | 110.4/ISQ  | A/2400                                 | 078                            | 13.2                          | Over railroad intersection.                                    |
| <b>Muskegon</b> (Muskegon County) .....           | 115.2/MKG  | A/2000                                 | 272                            | 8.4                           | Over intersection of NW/SE and NE/SW rws.                      |
| <b>Peck</b> (St Clair County Intl) .....          | 114.0/ECK  | A/2000                                 | 166                            | 22.5                          | Over apch end Rwy 04.  |



# VOR RECEIVER CHECK

401

| Facility Name (Arpt Name)                            | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description                       |
|--|------------|--|--------------------------------|-------------------------------|--|
| <b>Pellston</b> (Cheboygan City-County) .....        | 111.8/PLN  | A/2000                                 | 084                            | 6.4                           | Over center of E/W rwy.                      |
| <b>Pellston</b> (Pellston Rgnl Arpt of Emmet Co) ... | 111.8/PLN  | G                                      | 241                            | 6.4                           | At intersection of N/S and<br>E/W twys.      |
| <b>Pontiac</b> (Oakland Co Intl) .....               | 111.0/PSI  | G                                      | 113                            | 5.8                           | On circle on warmup pad<br>apch end Rwy 27L. |
|  | 111.0/PSI  | G                                      | 120                            | 5.0                           | On circle on warmup pad<br>apch end Rwy 09R. |
| <b>Saginaw</b> .....                                 | 112.9/MBS  | A/1700                                 | 058                            | 6.7                           | Over intersection US 10<br>and I-75.         |

## VOR TEST FACILITIES (VOT)

| Facility Name<br>(Airport Name)                   | Freq. | Type VOT<br>Facility | Remarks |
|---|-------|----------------------|---------|
| <b>Detroit City</b> .....                         | 111.6 | G                    |         |
| <b>Detroit</b> (Detroit Metropolitan Wayne Co.).. | 109.8 | G                    |         |

## OHIO

### VOR RECEIVER CHECKPOINTS

| Facility Name (Airport Name)                        | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description   |
|---|------------|--|--------------------------------|-------------------------------|--|
| <b>Buckeye</b> (Port Bucyrus-Crawford Co) .....     | 109.8/BUD  | A/2500                                 | 027                            | 10.5                          | Over intersection E/W<br>grass strip and Rwy<br>04-22.   |
| <b>Dryer</b> (Loraine County Rgnl) .....            | 113.6/DJB  | G                                      | 222                            | 1.3                           | At intersection of taxiway<br>and ramp.  |
| <b>Jefferson</b> (Ashtabula Co) .....               | 115.2/JFN  | G                                      | 067                            | 2.4                           | On ramp.   |
| <b>Jefferson</b> (Germack) .....                    | 115.2/JFN  | A/2000                                 | 278                            | 9.0                           | At intersection of E/W<br>interstate highway and<br>N-S highway south of town<br>of Geneva Ohio. |
| <b>Mansfield</b> (Shelby Community) .....           | 108.8/MFD  | A/2000                                 | 277                            | 4.8                           | Over hangar NW corner of<br>arpt.  |
| <b>Mansfield</b> (Mansfield Lahm Rgnl) .....        | 108.8/MFD  | G                                      | 134                            | 4.7                           | At intersection of taxiways<br>A and D.  |
| <b>Springfield</b> (Springfield-Beckley Muni) ..... | 113.2/SGH  | G                                      | 050                            | 1.2                           | On NE taxiway abeam<br>approach end Rwy 24.  |
| <b>Waterville</b> (Fulton Co.) .....                | 113.1/VWV  | A/1800                                 | 295                            | 24.2                          | Over hangar on WSW side<br>of arpt.  |
| <b>Zanesville</b> (Zanesville Muni) .....           | 111.4/ZZV  | A/2000                                 | 270                            | 5.5                           | Over water tank.   |
|   | 111.4/ZZV  | G                                      | 028                            | .5                            | On taxiway near apch end<br>of Rwy 22.   |

## VOR RECEIVER CHECK VOR TEST FACILITIES (VOT)

| Facility Name<br>(Airport Name)                | Freq. | Type VOT<br>Facility | Remarks                         |
|--|-------|----------------------|---------------------------------|
| <b>Akron Canton Rgnl</b> .....                 | 110.6 | G                    |                                 |
| <b>Cincinnati Muni Arpt Lunken Field</b> ..... | 108.4 | G                    |                                 |
| <b>Cleveland Hopkins Intl</b> .....            | 110.4 | G                    |                                 |
| <b>Columbus</b> (Port Columbus Intl.) .....    | 111.0 | G or                 |                                 |
|  |       | A/2300–5000          | Within 10 NM radius of airport. |
| <b>Dayton</b> (James M Cox Dayton Intl.) ..... | 111.0 | G or                 | Within a 10 NM radius of arpt.  |
|  |       | A/2500–4000          |                                 |
| <b>Sidney</b> (Sidney Muni) .....              | 111.0 | A/2500–4000          |                                 |

## WISCONSIN

### VOR RECEIVER CHECKPOINTS

| Facility Name (Arpt Name)                         | Freq/Ident | Type<br>Check<br>Pt.<br>Gnd.<br>AB/ALT | Azimuth<br>from<br>Fac.<br>Mag | Dist.<br>from<br>Fac.<br>N.M. | Checkpoint Description   |
|---|------------|--|--------------------------------|-------------------------------|--|
| <b>Eau Claire</b> (Chippewa Valley Rgnl) .....    | 112.9/EAU  | G                                      | 182                            | 2.1                           | Center of ramp.  |
| <b>Green Bay</b> (Austin Straubel Intl) .....     | 115.5/GRB  | G                                      | 141                            | 4.6                           | On Twy M1 at Rwy 18R<br>apch end.                                    |
| <b>Janesville</b> .....                           | 114.3/JVL  | A/1900                                 | 287                            | 12.7                          | Over water tower N of<br>Brodhead.                                   |
| <b>Janesville</b> (Southern Wisconsin Rgnl) ..... | 114.3/JVL  | G                                      | 035                            | 4.3                           | On taxiway A1.   |
| <b>Kenosha</b> (Sylvania) .....                   | 109.2/ENW  | A/2100                                 | 353                            | 5.9                           | Over N/S interstate<br>highway bridge over E/W<br>highway N of arpt. |
| <b>LaCrosse</b> (La Crosse Muni) .....            | 108.4/LSE  | G                                      | 356                            | 1.0                           | Runup pad AER Rwy 18.  |
| <b>Madison</b> (Dane Co Rgnl/Truax Fld) .....     | 108.6/MSN  | G                                      | 151                            | 0.6                           | On NE corner air national<br>guard ramp adjacent to<br>taxiway D.    |
| <b>Manitowoc</b> (Manitowoc Co) .....             | 111.0/MTW  | G                                      | 196                            | 0.5                           | SW corner of terminal<br>ramp.                                       |
| <b>Oshkosh</b> (Wittman Rgnl) .....               | 111.8/OSH  | G                                      | 282                            | 0.6                           | On taxiway at Rwy 09 apch<br>end                                     |
|   | 111.8/OSH  | G                                      | 173                            | 0.7                           | On N/S taxiway abeam<br>control tower.                               |
| <b>Rhineland</b> (Rhineland–Oneida Co) .....      | 109.2/RHI  | G                                      | 212                            | 0.5                           | At intersection of E–W<br>taxiway at terminal.                       |
| <b>Sheboygan Falls</b> (Sheboygan Co Meml) .....  | 110.0/FAH  | G                                      | 232                            | .4                            | On taxiway at Rwy 03 apch<br>end.                                    |
| <b>Stevens Point</b> (Stevens Point Muni) .....   | 110.6/STE  | A/2500                                 | 257                            | 12.1                          | Over N/S railroad and E/W<br>road in Rudolph.                        |
|   | 110.6/STE  | G                                      | 022                            | 0.6                           | From AER 21.   |
| <b>Wausau</b> (Central Wisconsin) .....           | 111.6/AUW  | A/2800                                 | 222                            | 5.5                           | Over intersection of N–S<br>and E–W rwy.                             |
| <b>West Bend</b> .....                            | 109.8/BJB  | A/2500                                 | 220                            | 7.6                           | Over microwave tower E of<br>Slinger.                                |

### VOR TEST FACILITIES (VOT)

| Facility Name<br>(Airport Name)            | Freq. | Type VOT<br>Facility | Remarks |
|--|-------|----------------------|---------|
| <b>Milwaukee</b> (Gen Mitchell Intl) ..... | 109.0 | G                    |         |

# PARACHUTE JUMPING AREAS

403

The following tabulation lists all reported parachute jumping sites in the area of coverage of this directory. Unless otherwise indicated, all activities are conducted during daylight hours and under VFR conditions. The busiest periods of activity are normally on weekends and holidays, but jumps can be expected at anytime during the week at the locations listed. Jumps within restricted airspace are not listed.

All times are local and altitudes MSL unless otherwise specified.

Contact facility and frequency is listed at the end of the remarks, when available, in bold face type.

Refer to Federal Aviation Regulations Part 105 for required procedures relating to parachute jumping.

Organizations desiring listing of their jumping activities in this publication should contact the nearest FSS, tower or ARTCC.

Qualified parachute jumping sites will be depicted on the appropriate visual chart(s).

Note: (c) in this publication indicates that the parachute jump area is charted.

To qualify for charting, a jump area must meet the following criteria:

- (1) Been in operation for at least 1 year.
- (2) Operate year round (at least on weekends).
- (3) Log 4,000 or more jumps each year.

In addition, jump sites can be nominated by FAA Regions if special circumstances require charting.

| LOCATION  | DISTANCE AND RADIAL FROM<br>NEAREST VOR/VORTAC | MAXIMUM<br>ALTITUDE | REMARKS   |
|---|--|---------------------|---|
| <b>ILLINOIS</b>   |  |                     |   |
| (c) Carmi Muni .....  | 19.7 NM; 298°Pocket City.....                  | 9,500 AGL           | 3 NM radius. SR-SS weekends.  |
| Deer Grove .....  | 25 NM; 343°Bradford .....                      | 12,500              | 3 NM radius. SR-SS Year round.  |
| Greenville Arpt .....   | 18 NM; 210°Vandalia .....                      | 13,500              | 3 NM radius. Weekends and<br>holidays, SR-1 hour after SS.<br><b>Kansas City Center 127.7</b>     |
| (c) Hinckley Arpt .....   | 22 NM; 308°Joliet.....                         | 14,500 AGL          | 2 NM radius. Mon-Fri 0800 to 1<br>hour after SS, Sat-Sun 0700 to 1<br>hour after SS.              |
| (c) Minier, Illinois Valley Parachute Club<br>Arpt .....        | 25 NM; 122°Peoria .....                        | 15,000              | Daily SR to 1 hour after SS.  |
| (c) Ottawa, Skydive Chicago Arpt .....                          | 23.1 NM; 250° Joliet.....                      | 17,500 AGL          | 2 NM radius. SR to 1 hour past<br>SS.   |
| (c) Rantoul National Aviation<br>Center-Frank Elliott Fld ..... | 16.5 NM; 019° Champaign .....                  | 13,500              | 2 NM radius. Daily 0600-2200.   |
| Sterling .....  | 16 NM; 206° Polo .....                         | 12,000 AGL          | Year round SR-SS. 10 NM radius.   |
| Tampico .....   | 23 NM; 200°Polo .....                          | 12,500              | 1 NM radius. 1000-SS daily.   |
| (c) Taylorville, Taylorville Muni.....                          | 24 NM; 138° Spinner .....                      | 15,000              | 5 NM radius. SR-1 hr past SS.   |
| (c) Vandalia, Vandalia Muni .....                               | 6.2 NM; 178° Vandalia .....                    | 15,000              | 5 NM radius. Fri, Sat, Sun and<br>holidays, SR-½ hour past SS.<br><b>Kansas City Center 124.3</b> |
| <b>INDIANA</b>  |  |                     |   |
| (c) Angola, Tri-State Steuben Co Arpt ....                      | 33 NM; 040°Wolf Lake .....                     | 14,500              | 5 NM radius, Mon, Wed, Fri, Sat,<br>Sun 0900-SS.  |
| Cloverdale, Swope Airstrip.....                                 | 25 NM; 085° Terre Haute .....                  | 12,500              | 5 NM radius. SR-SS daily.   |
| (c) Connersville .....  | 14 NM; 257° Richmond .....                     | 13,500              | 5 NM radius. Daily SR-SS.   |
| Crawfordsville, Crawfordsville Muni .....                       | 27.2 NM; 290° Brickyard .....                  | 15,000              | 3 NM radius. Fri-Sat-Sun SR-SS.   |
| (c) Flora, Flora Muni .....                                     | 22.4 NM; 272° Kokomo .....                     | 13,000              | 5 NM radius. Weekends and<br>holidays, 0900-SS daily.<br><b>Grissom APP CON 121.05</b>            |
| Franklin Flying Fld .....                                       | 17 NM; 220° Shelbyville .....                  | 13,500              | 5 NM radius. SR-SS daily.   |
| (c) Goshen Muni .....   | 10 NM; 090° Goshen .....                       | 14,500 AGL          | 1 NM radius. Weds, Fri-Sat-Sun<br>SR-SS. <b>South Bend Rgnl Tower<br/>132.05</b>                  |
| (c) Greensburg Muni .....                                       | 25 NM; 145° Shelbyville .....                  | 12,000 AGL          | 2 NM radius. 0900-2000 daily.   |
| Hobart Sky Ranch Arpt.....                                      | 15 NM; 077° Chicago Heights ...                | 10,000 AGL          | 2 NM radius. Weds, weekends<br>0800-SS.   |
| Kingsbury .....   | 23 NM; 230°Gipper .....                        | 1,500               | 0.3 NM radius. Occasional use.  |
| Mentone .....   | 26 NM; 183° Goshen .....                       | 12,500              | 3 NM radius. SR-SS daily.   |
| Muncie, Horizon Fld .....                                       | 10 NM; 360°Muncie .....                        | 13,000              | Daily 0600-1900.  |
| (c) Richmond, Richmond Muni.....                                | 0 NM; Richmond .....                           | 14,500              | 3 NM radius. SR-1 hour after<br>SS-daily.   |
| Veedersburg, Songer Arpt.....                                   | 24 NM; 220°Boiler .....                        | 10,000              | 5 NM radius. Weekends and<br>holidays, SR-SS.   |
| <b>MICHIGAN</b>   |  |                     |   |
| (c) Allegan, Padgham Fld.....                                   | 13 NM; 072° Pullman .....                      | 10,700              | 2 NM radius. Daily SR-SS.   |
| East Tawas, Iosco Co Arpt .....                                 | 8 NM; 192° Au Sable.....                       | 15,000              | 5 NM radius. May-Oct SR-SS<br>daily.  |
| Fowlerville .....   | 20 NM; 225° Flint .....                        | 12,000              | 5 NM radius. Apr-Oct 0800-SS.   |
| Fremont Muni .....  | 16.2 NM; 008° Muskegon .....                   | 12,000              | 3 NM radius. Apr-Oct Sat-Sun<br>SR-SS.  |
| Harbor Springs .....  | 17 NM; 235° Pellston.....                      | 12,000              | 3 NM radius. May-Sep daily<br>SR-SS.  |

## PARACHUTE JUMPING AREAS

| LOCATION   | DISTANCE AND RADIAL FROM<br>NEAREST VOR/VORTAC | MAXIMUM<br>ALTITUDE | REMARKS   |
|--|--|---------------------|---|
| Marshall, Brooks Fld.....                        | 14 NM; 107° Battle Creek.....                  | 15,000              | 5 NM radius. Apr–Oct daily<br>0900–SS.  |
| (c) Mount Pleasant Muni Arpt.....                | Ø NM; Mount Pleasant.....                      | 14,000              | 2 NM radius. Jan–Dec daily<br>0900–SS.  |
| (c) Romeo.....                                   | 26 NM; 085° Pontiac.....                       | 15,000              | 2 NM radius. Apr–Oct daily SR–SS.   |
| (c) Saginaw, Saginaw Co H.W. Browne<br>Arpt..... | 11 NM; 125° Saginaw.....                       | 12,000              | 2 NM radius. Apr–Nov daily SR–SS.   |
| (c) Tecumseh, Meyers–Diver's.....                | 22 NM; 272° Carleton.....                      | 17,000              | 5 NM radius. Apr–Oct daily SR–SS.   |
| <b>OHIO</b>                                      |  |                     |   |
| Alliance, Barber Arpt.....                       | 9 NM; 155° Akron.....                          | 13,500              | 5 NM radius. Mon, Wed, Thur, Fri<br>and weekends SR–SS.                           |
| Alliance, Miller Arpt.....                       | 10 NM; 139° Akron.....                         | 13,500 AGL          | 5 NM radius. Daily SR–SS.   |
| Belleville.....                                  | 15 NM; 168° Mansfield.....                     | 8,500               | 5 NM radius. SR–SS weekend.   |
| (c) Bowling Green, Bordner Arpt.....             | 8 NM; 212° Waterville.....                     | 14,000              | Daily. Radius 2 NM.   |
| (c) Celina, Lakefield Arpt.....                  | 26.5 NM; 298° Rosewood.....                    | 14,000              | 1 NM radius. Daily SR–SS.   |
| Centerburg, Chapman Mem.....                     | 12 NM; 325° Appleton.....                      | 12,000              | SR–SS weekends.   |
| (c) Chesapeake, Lawrence Co Airpark.....         | 26 NM; 052° Newcombe.....                      | 11,000              | 1 NM radius. 0900–2300<br>Sat–Sun. 1600–2300 Wed–Fri.                             |
| (c) Circleville, Clark Dream Strip.....          | 13 NM; 332° Yellow Bud.....                    | 17,500              | 2 NM radius. Wed 0600–Sun<br>2400. <b>Port Columbus Intl Tower<br/>125.95</b>     |
| Commercial Point.....                            | 32 NM; 233° Appleton.....                      | 10,000              | 0800–2100 Sat, Sun.   |
| Findlay.....                                     | 9 NM; 355° Findlay.....                        | 12,500 AGL          | Daily.  |
| Fulton County Arpt.....                          | 24.5; 295° Waterville.....                     | 10,500              | Daily SR–SS.  |
| (c) Garrettsville, Gates Arpt.....               | 11 NM; 172° Chardon.....                       | 13,500 AGL          | SR–SS daily.  |
| Grafton, Mole Arpt.....                          | 10 NM; 139° Dryer.....                         | 12,500              | 0700–0930 daily.  |
| Lebanon, Lebanon–Warren Co Arpt.....             | 21 NM; 280° Midwest.....                       | 14,500 AGL          | 5 NM radius. Daily SR–SS.   |
| Mansfield.....                                   | 4 NM; 132° Mansfield.....                      | 3,000               | 3 NM radius. Tue–Fri 0800–2200.<br>Unit training assemblies 1<br>weekend a month. |
| Ottawa, Putnam County Arpt.....                  | 10.9 NM; 298° Findlay.....                     | 10,500 AGL          | SR–2400.  |
| (c) Petersburg.....                              | 16 NM; 294° Ellwood City.....                  | 12,500 AGL          | 2 NM radius. Mon–Fri 1700–SS,<br>weekends SR–SS.                                  |
| (c) Rittman, Hilty Fld.....                      | 21 NM; 314° Briggs.....                        | 16,000 AGL          | 5 NM radius. Daily 1 hour before<br>SR–1 hour after SS.                           |
| Salem, Phillis Lakefront Arpt.....               | 27 NM; 088° Briggs.....                        | 10,000              | Evening and weekends to SS  |
| Stonelick Parachute Center.....                  | 27 NM; 068° Cincinnati.....                    | 10,000              | SR–SS daily.  |
| Sycamore.....                                    | 25 NM; 285° Mansfield.....                     | 12,500 AGL          | 1 NM radius. Daily SR–SS.   |
| Van Wert County.....                             | 27.3 NM; 104° Fort Wayne.....                  | 10,000              | Weekdays 1600–SS, Weekends<br>SR–SS   |
| Vickery, Wrights Fld.....                        | 12 NM; 270° Sandusky.....                      | 10,000 AGL          | SR–SS weekends.   |
| (c) Xenia, Skydive Green County Inc.....         | 32 NM; 129° Dayton.....                        | 12,500 AGL          | Daily SR–2400.  |
| <b>WISCONSIN</b>                                 |  |                     |   |
| (c) Baldwin Arpt.....                            | 45 NM; 095° Gopher.....                        | 15,000 AGL          | Wed–Fri 1500–½ hour past SS,<br>Weekends SR–½ hour past SS.                       |
| (c) Bristol, Winfield Arpt.....                  | 37.5 NM; 160° Badger.....                      | 12,500 AGL          | SR–½ hour past SS.  |
| (c) Chippewa Falls, Wissota Arpt.....            | 9 NM; 070° Eau Claire.....                     | 15,000              | 5 NM radius. Daily SR–1 hour past<br>SS.  |
| (c) East Troy Muni Arpt.....                     | 20 NM; 190° Badger.....                        | 14,500 AGL          | SR–½ hour past SS.  |
| Edgerton, Jana Arpt.....                         | 20 NM; 142° Madison.....                       | 11,000              | 10 NM radius. Wed–Sun &<br>Holidays SR–SS.  |
| (c) Fort Atkinson Muni.....                      | 25 NM; 247° Badger.....                        | 14,000              | 3 NM radius. Daily SR–SS.   |
| Lake Delton.....                                 | 3 NM; 332° Dells.....                          | 12,500              | Daily May 15–Sept 25.   |
| (c) Lancaster Muni Arpt.....                     | 22.8 NM; 359° Dubuque.....                     | 13,500 AGL          | 2 NM radius. Sat–Sun 0900–1 hr<br>past SS. Wed and Fri 1500–1 hr<br>past SS.      |
| (c) Marshall, Mathaire Fld.....                  | 16 NM; 058° Madison.....                       | 12,500 AGL          | SR–½ hour past SS.  |
| (c) Oshkosh.....                                 | 8 NM; 293° Oshkosh.....                        | 13,500 AGL          | Daily SR–SS.  |
| (c) Pulaski, Carter Arpt.....                    | 5 NM; 350° Green Bay.....                      | 12,000 AGL          | Daily SR–SS.  |
| (c) Shiocton.....                                | 17 NM; 250° Green Bay.....                     | 13,500              | 5 NM SR–SS daily.   |
| (c) Superior, Richard I Bong.....                | 8 NM; 143° Duluth.....                         | 12,500 AGL          | 3 NM radius. Daily SR–1 hour past<br>SS.  |

The purpose of this bulletin is to provide major changes in aeronautical information that have occurred since the last publication date of each Sectional Aeronautical, VFR Terminal Area, and Helicopter Route Charts listed. The general policy is to include only those changes to controlled airspace and special use airspace that present a hazardous condition or impose a restriction on the pilot, and major changes to airports and radio navigational facilities, thereby providing the VFR pilot with the essential data necessary to update and maintain chart currency. The data is grouped by type and then by effective date. When a new edition of the Aeronautical Chart is published, the corrective tabulation will be removed from this bulletin. Inasmuch as this Bulletin provides major changes only, pilots should consult the airport listing in this directory for all new information. Users of U.S. World Aeronautical Charts (WAC) and U.S. Gulf Coast VFR Aeronautical Charts should consult the appropriate Sectional and VFR Terminal Area Charts for revisions.

Military Training Routes (MTRs) are shown on Sectional Aeronautical Charts, VFR Terminal Area, and Helicopter Route Charts. Only the route centerline, direction of flight and the route designator are shown —route widths and altitudes are not shown. Since these routes are subject to change every 56 days and the charts are reissued generally every 6 months, routes with a change in the alignment of the charted route centerline will be listed in this Aeronautical Chart Bulletin below. You are advised to contact the nearest FSS for route dimensions and current status for those routes affecting your flight.

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## CG-21 WORLD AERONAUTICAL CHART

### 39th Edition, 24 Sep 2009

#### OBSTRUCTIONS

**22 Oct 2009** Add obst 1348' MSL (600' AGL), 34°15'06"N, 84°59'12"W.  
Change obst from 312' MSL to 1312' MSL, 33°35'33"N, 083°58'31"W.

#### AIRPORTS

**22 Oct 2009** Change elevation from 191' to 1911' at Blairsville arpt, 34°51'16"N, 083°59'50"W. Change runway orientation to 01/19 at Halifax-Northampton Co Rgnl arpt, 36°19'47"N, 077°38'07"W.

#### NAVAIDS

**22 Oct 2009** No Major Changes.

#### AIRSPACE

**22 Oct 2009** No Major Changes.

#### SPECIAL USE AIRSPACE

**22 Oct 2009** No Major Changes.

#### MILITARY TRAINING ROUTES

**22 Oct 2009** No Major Changes.

#### MISCELLANEOUS

**22 Oct 2009** No Major Changes.

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**CHICAGO HELICOPTER ROUTE CHART****5th Edition, 12 May 2005****OBSTRUCTIONS****12 May 2005 – 7 Jul 2005** No Major Changes.**1 Sep 2005** Add obst 896' MSL (300' AGL) UC, 41°46'40"N, 87°49'16"W.**27 Oct 2005 – 5 Jul 2007** No Major Changes.**30 Aug 2007** Change group obst from 1780' MSL (1195' AGL) to 1973' MSL (1375' AGL) UC, 41°53'20"N, 87°37'36"W.**25 Oct 2007** Change obst from 1130' MSL (335' AGL) to 1195' MSL (400' AGL), 41°36'01"N, 87°58'44"W.**20 Dec 2007 – 31 Jul 2008** No Major Changes.**25 Sep 2008** Add obst 968' MSL (370' AGL) UC, 41°34'40"N, 87°31'33"W.**20 Nov 2008 – 22 Oct 2009** No Major Changes.**AIRPORTS****12 May 2005 – 7 Jul 2005** No Major Changes.**1 Sep 2005** Delete MILL ROSE arpt, 42°04'38"N, 88°09'35"W.**27 Oct 2005** Delete DARIEN-WOODRIDGE FIRE DEPT heliport, 41° 45'15"N, 88°00'26"W.**22 Dec 2005 – 5 Jul 2007** No Major Changes.**30 Aug 2007** Change CTAF freq 123.05 to 122.9 at SCHAUMBURG MUNI HELISTOP heliport, 42°02'53"N, 88°03'09"W.

Delete ADDISON FIRE DEPARTMENT STATION 3 heliport, 41°55'48"N, 88°02'28"W.

**25 Oct 2007 – 10 Apr 2008** No Major Changes.**5 Jun 2008** Delete LANDIS PLASTICS heli, 41°40'43"N, 87°45'45"W.

Delete CRYSTAL LAKE HOLIDAY INN heli, 42°13'14"N, 88°17'05"W.

Delete CLARK heli, 42°22'06"N, 87°59'30"W.

**31 Jul 2008 – 20 Nov 2008** No Major Changes.**15 Jan 2009**

Change CHICAGO O'HARE ATCT frequencies from 120.75(S), 126.9(N), 127.925 132.7 390.9 to 120.75 126.9 (CNTR TWR), 132.7 390.9 (CNTR TWR), 135.925 (N TWR), 41°58'51"N, 87°54'23"W.

**12 Mar 2009** No Major Changes.**7 May 2009** Delete SEARS MERCHANDISE GROUP heli, 42°04'35"N, 088°13'01"W.

Change CHICAGO O'HARE ATCT freq from 135.925(N TWR) to 128.15(N TWR), 41°58'51"N, 87°54'23"W.

**2 Jul 2009 – 22 Oct 2009** No Major Changes.**NAVAIDS****12 May 2005 – 22 Oct 2009** No Major Changes.**AIRSPACE****12 May 2005 – 25 Sep 2008** No Major Changes.**20 Nov 2008** Change CHICAGO Class B freq from 128.45 to 133.625.**12 Mar 2009 – 22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****12 May 2005 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****12 May 2005 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****12 May 2005 – 22 Oct 2009** No Major Changes.

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**CHICAGO SECTIONAL**  
**79th Edition, 22 Oct 2009**

**OBSTRUCTIONS**

22 Oct 2009 No Major Changes.

**AIRPORTS**

22 Oct 2009 No Major Change.

**NAVAIDS**

22 Oct 2009 No Major Changes.

**AIRSPACE**

22 Oct 2009 No Major Changes.

**SPECIAL USE AIRSPACE**

22 Oct 2009 No Major Changes.

**MILITARY TRAINING ROUTES**

22 Oct 2009 No Major Changes.

**MISCELLANEOUS**

22 Oct 2009 No Major Changes.

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**CHICAGO TERMINAL AREA CHART**  
**79th Edition, 22 Oct 2009**

**OBSTRUCTIONS**

22 Oct 2009 No Major Changes.

**AIRPORTS**

22 Oct 2009 No Major Changes.

**NAVAIDS**

22 Oct 2009 No Major Changes.

**AIRSPACE**

22 Oct 2009 No Major Changes.

**SPECIAL USE AIRSPACE**

22 Oct 2009 No Major Changes.

**MILITARY TRAINING ROUTES**

22 Oct 2009 No Major Changes.

**MISCELLANEOUS**

22 Oct 2009 No Major Changes.

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**CINCINNATI SECTIONAL**  
**82nd Edition, 2 Jul 2009****OBSTRUCTIONS****2 Jul 2009** No Major Changes.**27 Aug 2009** Add obst 1525' MSL (410' AGL) UC, 40°12'15"N, 82°35'03"W.

Add obst 2811' MSL (305' AGL) UC, 39°24'30"N, 79°21'41"W.

Add obst 1687' MSL (380' AGL) UC, 38°00'44"N, 82°10'09"W.

Add obst 1341' MSL (300' AGL) UC, 38°43'50"N, 81°22'53"W.

Add obst 3611' MSL (315' AGL) UC, 37°53'06"N, 80°46'24"W.

Add obst 1067' MSL (300' AGL) UC, 38°17'38"N, 82°11'57"W.

Add obst 1217' MSL (300' AGL) UC, 38°38'11"N, 81°23'43"W.

Add obst 1328' MSL (350' AGL) UC, 37°37'05"N, 84°15'43"W.

Add obst 1810' MSL (310' AGL) UC, 38°19'51"N, 79°03'36"W.

Add obst 2925' MSL (300' AGL) UC, 37°39'29"N, 80°57'29"W.

Add obst 2752' MSL (300' AGL) UC, 37°32'06"N, 80°55'20"W.

Add obst 1213' MSL (310' AGL) UC, 38°41'39"N, 83°37'34"W.

Add obst 1198' MSL (300' AGL) UC, 38°20'28"N, 82°03'56"W.

Add obst 1242' MSL (310' AGL) UC, 39°37'20"N, 82°14'33"W.

Add obst 1680' MSL (550' AGL) UC, 39°53'38"N, 79°55'58"W.

**22 Oct 2009** Add obst 1224' MSL (300' AGL) UC, 39°44'58"N, 84°23'43"W.

Add obst 1358' MSL (312' AGL) UC, 39°00'37"N, 83°34'13"W.

Add obst 1629' MSL (285' AGL) UC, 36°04'48"N, 84°31'00"W.

Add obst 3434' MSL (270' AGL) UC, 36°43'42"N, 80°27'08"W.

Add obst 1674' MSL (554' AGL) UC, 39°42'28"N, 79°57'32"W.

Add obst 1403' MSL (297' AGL) UC, 38°48'04"N, 82°57'44"W.

Add obst 3226' MSL (400' AGL) UC, 40°01'35"N, 78°48'07"W.

Add obst 3190' MSL (400' AGL) UC, 40°03'28"N, 78°48'15"W.

**AIRPORTS****2 Jul 2009** No Major Changes.**27 Aug 2009** Change CTAF 122.9 to 123.05 at MCCREARY arpt, 36°41'43"N, 84°23'29"W.**22 Oct 2009** Delete POWELL arpt, 36°02'40"N, 84°00'15"W.**NAVAIDS****2 Jul 2009 – 27 Aug 2009** No Major Changes.**22 Oct 2009** Delete LOUISA NDB, 38°01'13"N, 77°51'32"W.**AIRSPACE****2 Jul 2009 – 27 Aug 2009** No Major Changes.**27 Aug 2009** Revise WAVERLY, OH Class E. That airspace extending upward from 700 feet above the surface within a 9.9-mile radius of Pike County Airport.

Delete DAYTON Class C freq 127.65.

Add DAYTON Class C freqs 118.425 and 127.225.

Revise DAYTON Class C freq from 316.7 to 352.05.

**22 Oct 2009** No Major Change.**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.



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**CINCINNATI TERMINAL AREA CHART**  
**21st Edition, 2 Jul 2009****OBSTRUCTIONS****2 Jul 2009** No Major Changes.**27 Aug 2009** Add obst 1144' MSL (258' AGL) UC, 38°42'07"N, 85°22'02"W.**22 Oct 2009** No Major Changes.**AIRPORTS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**NAVAIDS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.

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**CLEVELAND TERMINAL AREA CHART**  
**72nd Edition, 24 Sep 2009****OBSTRUCTIONS****22 Oct 2009** No Major Changes.**AIRPORTS****22 Oct 2009** Delete SHENANDOAH AIRPARK arpt, 40°55'12"N, 82°28'44"W.**NAVAIDS****22 Oct 2009** No Major Changes.**AIRSPACE****22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****22 Oct 2009** No Major Changes.**MISCELLANEOUS****22 Oct 2009** No Major Changes.

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**DETROIT HELICOPTER ROUTE CHART****1st Edition, 4 Aug 2005****OBSTRUCTIONS****1 Sep 2005** No Major Changes.**27 Oct 2005** Add group obst 1009' MSL (388' AGL) UC, 42°03'58"N, 83° 23'40"W.**22 Dec 2005 – 12 Mar 2009** No Major Changes.**7 May 2009** Add obst 1293' MSL (330' AGL), 42°09'30"N, 84°01'31"W.**2 Jul 2009 – 22 Oct 2009** No Major Changes.**AIRPORTS****1 Sep 2005** Add SELFRIDGE ANGB ATCT 340.7, 42°36'46"N, 82°49'54"W.**27 Oct 2005** Delete HYNES arpt, 42°36'39"N, 83°43'58"W.**22 Dec 2005 – 8 Jun 2006** No Major Changes.**3 Aug 2006** Delete CTAF freq, 122.9 at SALINE arpt., 42°08'47"N, 83°47'31"W.**28 Sep 2006 – 10 May 2007** No Major Changes.**5 Jul 2007** Delete CARRIAGE LANE arpt, 42°27'52"N, 84°02'05"W.**30 Aug 2007 – 14 Feb 2008** No Major Changes.**10 Apr 2008** Delete FULLER heliport, 42°33'34"N, 83°10'40"W.**5 Jun 2008 – 31 Jul 2008** No Major Changes.**25 Sep 2008** Add SELFRIDGE ANGB ATCT freq 225.4, 42°36'30"N, 82°50'07"W.**20 Nov 2008 – 7 May 2009** No Major Changes.**2 Jul 2009** Delete INDEPENDENCE GREEN heliport, 42°28'12"N, 83°25'09"W. Delete COBO HALL heliport, 42°19'33"N, 83°02'52"W.**27 Aug 2009 – 22 Oct 2009** No Major Changes.**NAVAIDS****1 Sep 2005 – 13 Apr 2006** No Major Changes.**8 Jun 2006** Delete LAUREL NDB, 42°14'38"N, 83°02'51"W.**3 Aug 2006 – 22 Oct 2009** No Major Changes.**AIRSPACE****1 Sep 2005 – 15 Mar 2007** No Major Changes.**10 May 2007** Change DETROIT Class B freq from 124.9 to 127.5.**5 Jul 2007 – 22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****1 Sep 2005 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****1 Sep 2005 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****1 Sep 2005 – 16 Feb 2006** No Major Changes.**13 Apr 2006** Change MEF 1<sup>1</sup> to 1<sup>2</sup> in quadrant 42°00' – 42°15'N, 83°15' – 83°30' W.**8 Jun 2006 – 22 Oct 2009** No Major Changes.

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**DETROIT SECTIONAL**  
**79th Edition, 24 Sep 2009****OBSTRUCTIONS**

**22 Oct 2009** Add obst 1193' MSL (285' AGL) UC, 41°32'32"N, 80°51'34"W.

Add obst 2540' MSL (260' AGL) UC, 41°53'03"N, 78°37'09"W.

Add obst 956' MSL (203' AGL), 42°41'02"N, 78°54'26"W.

Add obst 702' MSL (204' AGL), 42°57'23"N, 76°59'42"W.

Add obst 3226' MSL (400' AGL) UC, 40°01'35"N, 78°48'07"W.

Add obst 1001' MSL (394' AGL), 42°16'06"N, 82°16'30"W.

**AIRPORTS**

**22 Oct 2009** Delete ZEITLER arpt, 43°29'24"N, 84°21'54"W.

Delete PEWANOGOWINK-BANKS arpt, 43°11'10"N, 83°54'04"W.

Delete SHENANDOAH AIRPARK arpt, 40°55'12"N, 82°28'44"W.

Delete MAYES arpt, 43°14'27"N, 84°52'48"W.

**NAVAIDS**

**22 Oct 2009** No Major Changes.

**AIRSPACE**

**22 Oct 2009** Revise MANSFIELD, OH class E airspace. That airspace extending upward from 700 feet above the surface within a 6.9-mile radius of Mansfield Lahm Regional Airport and within a 6.3-mile radius of Galion Municipal Airport, and within a 6.3-mile radius of Shelby Community Airport, and within a 6.3-mile radius of Willard Airport, and within 4 miles each side of the 137° bearing from Mansfield Lahm Regional Airport extending from the 6.9-mile radius to 11.1 miles southeast of the airport, and within 4 miles each side of the 317° bearing from Mansfield Lahm Regional Airport extending from the 6.9-mile radius to 10.7 miles northwest of the airport, and within 6.1 miles each side of the Mansfield VORTAC 307° radial extending from the 6.9-mile radius to 13.3 miles northwest of the VORTAC, and within 4.4 miles each side of the Mansfield VORTAC 130° radial extending from the 6.9-mile radius to 13.8 miles southeast of the VORTAC.

**SPECIAL USE AIRSPACE**

**22 Oct 2009** No Major Changes.

**MILITARY TRAINING ROUTES**

**22 Oct 2009** No Major Changes.

**MISCELLANEOUS**

**22 Oct 2009** No Major Changes.

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**DETROIT TERMINAL AREA CHART****72nd Edition, 24 Sep 2009****OBSTRUCTIONS****22 Oct 2009** No Major Changes.**AIRPORTS****22 Oct 2009** No Major Changes.**NAVAIDS****22 Oct 2009** No Major Changes.**AIRSPACE****22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****22 Oct 2009** No Major Changes.**MISCELLANEOUS****22 Oct 2009** No Major Changes.**GREEN BAY SECTIONAL****78th Edition, 4 Jun 2009****OBSTRUCTIONS****2 Jul 2009** Add obst 1189'MSL (260'AGL)UC, 44°26'06"N, 87°44'04"W. Add obst 1120'MSL (320'AGL)UC, 44°14'18"N, 88°57'34"W. Add obst 1371'MSL (320'AGL)UC, 44°53'14"N, 88°53'35"W. Add obst 1402'MSL (278'AGL)UC, 45°19'53"N, 91°42'24"W. Add obst 1289'MSL (310'AGL)UC, 44°15'58"N, 89°13'31"W. Add obst 1974'MSL (320'AGL)UC, 45°43'10"N, 89°08'14"W.**27 Aug 2009** Add obst 1070'MSL (270'AGL)UC, 44°38'29"N, 91°59'35"W.

Add obst 1584'MSL (280'AGL)UC, 45°27'05"N, 91°57'04"W.

Add obst 1609'MSL (320'AGL)UC, 45°16'05"N, 91°51'33"W.

**22 Oct 2009** Add obst 1796'MSL (420'AGL)UC, 47°24'20"N, 92°17'06"W.**AIRPORTS****2 Jul 2009** Delete RAMSY FARM arpt, 45°50'19"N, 87°19'20"W. Delete PEIL'S VERMILLION WINGS spb, 47°53'07"N, 92°24'18"W.**27 Aug 2009** No Major Changes.**22 Oct 2009** Delete FONTECCHIO arpt, 45°47'05"N, 88°04'05"W.**NAVAIDS****2 Jul 2009 – 27 Aug 2009** No Major Changes.**22 Oct 2009** Delete MANITOWISH NDB, 46°07'23"N, 89°52'58"W.**AIRSPACE****2 Jul 2009 – 27 Aug 2009** No Major Changes.**22 Oct 2009** Revise IRONWOOD, MI. Class E: That airspace extending upward from 700 feet above the surface within a 6.6-mile radius of Gogebic Iron County Airport and within 3.2 miles each side of the Ironwood VORTAC 104° radial extending from the 6.6-mile radius to 11.7 miles southeast of the VORTAC, and within 2.4 miles each side of the Ironwood VORTAC 260° radial extending from the 6.6-mile radius to 7 miles west of the VORTAC and within 4 miles each side of the 090° bearing from the airport extending from the 6.6-mile radius to 11.4 miles east of the airport; and that airspace extending upward from 1,200 feet above the surface within a 21-mile radius of the Ironwood VORTAC.**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.

## KANSAS CITY SECTIONAL

### 82nd Edition, 4 Jun 2009

**OBSTRUCTIONS**

**2 Jul 2009** Add obst 1308' MSL (358' AGL) UC, 38°14'23"N, 94°56'37"W. Add obst 1682' MSL (310' AGL) UC, 37°02'18"N, 93°34'31"W. Add obst 1012' MSL (265' AGL) UC, 39°36'08"N, 93°06'18"W. Change obst from 1656' MSL (741' AGL) to 1949' MSL (1034' AGL), 38°21'40"N, 90°32'55"W. Add obst 1129' MSL (290' AGL) UC, 38°47'46"N, 91°21'16"W.

**27 Aug 2009** Add obst 1265' MSL (290' AGL) UC, 37°32'46"N, 90°12'37"W. Add obst 560' MSL (260' AGL) UC, 36°40'24"N, 89°58'57"W. Add obst 1516' MSL (260' AGL) UC, 37°39'55"N, 91°35'29"W. Add obst 1490' MSL (320' AGL) UC, 36°27'39"N, 94°27'12"W. Add obst 995' MSL (260' AGL) UC, 39°04'38"N, 90°50'02"W.

**22 Oct 2009** Add obst 1635' MSL (305' AGL) UC, 36°27'17"N, 93°25'52"W. Add obst 1641' MSL (238' AGL), 37°59'00"N, 96°52'21"W. Add obst 934' MSL (520' AGL), 38°06'35"N, 90°15'30"W. Add obst 1197' MSL (260' AGL), 37°44'20"N, 90°30'11"W. Add obst 1025' MSL (275' AGL), 37°21'50"N, 90°41'52"W. Add obst 1187' MSL (255' AGL) UC, 36°46'11"N, 96°12'35"W. Add obst 1481' MSL (310' AGL) UC, 37°49'56"N, 91°33'28"W.

**AIRPORTS**

**2 Jul 2009** Delete MARTIN arpt, 39°25'01"N, 90°35'09"W. Delete JOAN LAKE arpt, 38°12'30"N, 90°52'00"W. Delete SONTIMER arpt, 38°48'30"N, 90°36'45"W.

**27 Aug 2009** Change CTAF 122.825 to 123.0 at BARTLESVILLE arpt, 36°45'51"N, 96°00'40"W. Delete SMITH arpt, 39°18'47"N, 90°16'40"W.

**22 Oct 2009** No Major Changes.

**NAVAIDS**

**2 Jul 2009** No Major Changes.

**27 Aug 2009** Delete MOSBY NDB, 39°20'45"N, 94°18'27"W. Shutdown EL DORADO NDB, 37°46'46"N, 96°48'59"W.

**22 Oct 2009** Shutdown BILMART NDB, 36°58'11"N, 92°40'39"W.

**AIRSPACE**

**2 Jul 2009** No Major Changes.

**27 Aug 2009** Revise MOUNT STERLING, IL Class E: That airspace extending upward from 700 feet above the surface within a 6.6-mile radius of Mount Sterling Municipal Airport. Revise FULTON, MO Class E: That airspace extending upward from 700 feet above the surface within a 6.5-mile radius of Elton Hensley Memorial Airport and within 2.6 miles each side of the 069° bearing from the Guthrie NDB extending from the 6.5-mile radius of the airport to 7 miles northeast of the NDB, and within 2.6 miles each side of the 229° bearing from the NDB extending from the 6.5-mile radius of the airport to 7 miles southwest of the NDB.

**22 Oct 2009** No Major Changes.

**SPECIAL USE AIRSPACE**

**2 Jul 2009 – 27 Aug 2009** No Major Changes.

**22 Oct 2009** Add SHIRLEY A MOA: Boundary beginning at 35°19'00"N, 92°38'00"W to 35°19'00"N, 93°12'00"W to 35°38'15"N, 93°35'00"W to 36°02'00"N, 93°13'00"W to 36°02'00"N, 93°06'15"W to 36°06'00"N, 93°06'15"W to 36°06'00"N, 92°38'00"W to the point of beginning. Altitude: 11,000' MSL to but not including FL 18,000'. Time of use: 0700-1200 and 1300-1700, Monday-Friday; other times by NOTAM. Controlling agency: Memphis Cntr. Frequency: 281.55.

Add SHIRLEY B MOA: Boundary beginning at 35°19'00"N, 92°38'00"W to 36°06'00"N, 92°38'00"W to 36°06'00"N, 92°07'11"W to 35°58'53"N, 91°46'00"W to 35°19'00"N, 92°02'00"W to the point of beginning. Altitude: 11,000' MSL to but not including FL 18,000'. Time of use: 0700-1200 and 1300-1700, Monday-Friday; other times by NOTAM. Controlling agency: Memphis Cntr. Frequency: 281.55.

**MILITARY TRAINING ROUTES**

**2 Jul 2009** No Major Changes.

**27 AUG 2009** IR 504 Revised

**22 Oct 2009** No Major Changes.

**MISCELLANEOUS**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

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**LAKE HURON SECTIONAL**  
**78th Edition, 24 Sep 2009**

**OBSTRUCTIONS**

**22 Oct 2009** No Major Changes.

**AIRPORTS**

**22 Oct 2009** No Major Changes.

**NAVAIDS**

**22 Oct 2009** No Major Changes.

**AIRSPACE**

**22 Oct 2009** No Major Changes.

**SPECIAL USE AIRSPACE**

**22 Oct 2009** No Major Changes.

**MILITARY TRAINING ROUTES**

**22 Oct 2009** No Major Changes.

**MISCELLANEOUS**

**22 Oct 2009** No Major Changes.

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**MINNEAPOLIS-ST. PAUL TERMINAL AREA CHART**  
**72nd Edition, 2 Jul 2009**

**OBSTRUCTIONS**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

**AIRPORTS**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

**NAVAIDS**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

**AIRSPACE**

**2 Jul 2009 – 27 Aug 2009** No Major Changes.

**22 Oct 2009** Revise MINNEAPOLIS, MN. Class E. That airspace extending upward from 700 feet above the surface within a 20-mile radius of the Minneapolis-St. Paul International Airport (Wold-Chamberlain) Airport DME antenna, and within a 6.5-mile radius of the Anoka County-Blaine Airport (Janes Field), and within 4 miles each side of the 001° bearing from the Anoka County-Blaine Airport (Janes Field) extending from the 6.5-mile radius to 9.9 miles north of the airport, and within a 6.3-mile radius of the Lake Elmo Airport, and within a 6.4-mile radius of the Airlake Airport, and within 3.3 miles each side of the 084° bearing from the Farmington VORTAC extending from the 6.4-mile radius to 14.8 miles east of the Airlake Airport.

**SPECIAL USE AIRSPACE**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

**MILITARY TRAINING ROUTES**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

**MISCELLANEOUS**

**2 Jul 2009 – 22 Oct 2009** No Major Changes.

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## PITTSBURGH TERMINAL AREA CHART

### 72nd Edition, 24 Sep 2009

**OBSTRUCTIONS****22 Oct 2009** No Major Changes.**AIRPORTS****22 Oct 2009** No Major Changes.**NAVAIDS****22 Oct 2009** No Major Changes.**AIRSPACE****22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****22 Oct 2009** No Major Changes.**MISCELLANEOUS****22 Oct 2009** No Major Changes.

## ST. LOUIS SECTIONAL

### 80th Edition, 2 Jul 2009

**OBSTRUCTIONS****2 Jul 2009** No Major Changes.**27 Aug 2009** Add obst 1144' MSL (258' AGL) UC, 38°42'07"N, 85°22'02"W.

Add obst 1328' MSL (350' AGL) UC, 37°37'05"N, 84°15'43"W.

Add obst 865' MSL (304' AGL) UC, 37°22'45"N, 88°39'47"W.

Add obst 1265' MSL (290' AGL) UC, 37°32'46"N, 90°12'37"W.

Add obst 560' MSL (260' AGL) UC, 36°40'24"N, 89°58'57"W.

Add obst 995' MSL (260' AGL) UC, 39°04'38"N, 90°50'02"W.

Add obst 792' MSL (270' AGL) UC, 37°38'14"N, 87°38'10"W.

Add obst 865' MSL (306' AGL) UC, 39°12'53"N, 87°20'48"W.

**22 Oct 2009** Add obst 1224' MSL (300' AGL) UC, 39°44'58"N, 84°23'43"W.

Add obst 1629' MSL (285' AGL) UC, 36°04'48"N, 84°31'00"W.

Add obst 916' MSL (258' AGL) UC, 40°03'49"N, 87°42'44"W.

Add obst 934' MSL (520' AGL) UC, 38°06'35"N, 90°15'30"W.

Add obst 1197' MSL (260' AGL) UC, 37°44'20"N, 90°30'11"W.

Add obst 1025' MSL (275' AGL) UC, 37°21'50"N, 90°41'52"W.

Add obst 797' MSL (330' AGL) UC, 36°34'10"N, 88°50'13"W.

Add obst 754' MSL (320' AGL) UC, 36°47'55"N, 88°30'22"W.

**AIRPORTS****2 Jul 2009** No Major Changes.**27 Aug 2009** Change CAPE GIRARDEAU ATCT freq 119.0 to 125.525, 37°13'31"N, 89°34'15"W.

Change CTAF 119.0 to 125.525 at CAPE GIRARDEAU arpt, 37°13'31"N, 89°34'15"W.

Delete O'NEAL arpt, 38°41'29"N, 87°33'08"W.

Change CTAF 122.9 to 123.05 at MC CREARY CO arpt, 36°41'43"N, 84°23'29"W.

Delete HEMP RIDGE arpt, 38°09'11"N, 85°07'08"W.

Delete SMITH arpt, 39°18'47"N, 90°16'40"W.

**22 Oct 2009** Delete CLARK arpt, 40°11'40"N, 86°31'23"W.

Delete POWELL arpt, 36°02'40"N, 84°00'16"W.

Delete HIGGINBOTHAM arpt, 39°20'29"N, 87°31'53"W.

**NAVAIDS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**AIRSPACE****2 Jul 2009** No Major Changes.**27 Aug 2009** Revise MOUNT STERLING, IL CLASS E: That airspace extending upward from 700 feet above the surface within a 6.6-mile radius of Mount Sterling Municipal Airport.

Delete DAYTON Class C freq 127.65.

Add DAYTON Class C freqs 118.425 and 127.225.

Revise DAYTON Class C freq from 316.7 to 352.05.

**22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.

## ST. LOUIS TERMINAL AREA CHART

### 72nd Edition, 2 Jul 2009

**OBSTRUCTIONS****2 Jul 2009** No Major Changes.**27 Aug 2009** Add obst 995' MSL (260' AGL) UC, 39°04'38"N, 90°50'02"W.**22 Oct 2009** No Major Changes.**AIRPORTS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**NAVAIDS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.

## TWIN CITIES SECTIONAL

### 78th Edition, 2 Jul 2009

**OBSTRUCTIONS****2 Jul 2009** No Major Changes.**27 Aug 2009** Add windmill farm. 2608' is highest MSL, 45°57'36"N, 98°58'15"W.**22 Oct 2009** Add obst 1580' MSL (305' AGL) UC, 45°20'57"N, 95°15'14"W.

Add obst 1981' MSL (295' AGL) UC, 46°23'06"N, 100°37'17"W.

Add obst 2414' MSL (340' AGL) UC, 48°52'37"N, 100°03'24"W.

Add obst 2514' MSL (340' AGL) UC, 48°56'57"N, 100°03'14"W.

Add obst 2361' MSL (260' AGL) UC, 47°34'40"N, 100°36'13"W.

Add obst 2237' MSL (260' AGL) UC, 47°24'38"N, 100°35'22"W.

Add obst 2238' MSL (260' AGL) UC, 47°32'29"N, 100°14'40"W.

Add obst 2334' MSL (310' AGL) UC, 47°23'02"N, 100°16'57"W.

Add windmill farm. 2118' is highest MSL, 48°30'23"N, 99°54'54"W.

**AIRPORTS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**NAVAIDS****2 Jul 2009 – 22 Oct 2009** No Major Changes.**AIRSPACE****2 Jul 2009 – 27 Aug 2009** No Major Changes.

**22 Oct 2009** Revise MINNEAPOLIS, MN. Class E. That airspace extending upward from 700 feet above the surface within a 20-mile radius of the Minneapolis-St. Paul International Airport (Wold-Chamberlain) Airport DME antenna, and within a 6.5-mile radius of the Anoka County-Blaine Airport (Janes Field), and within 4 miles each side of the 001° bearing from the Anoka County-Blaine Airport (Janes Field) extending from the 6.5-mile radius to 9.9 miles north of the airport, and within a 6.3-mile radius of the Lake Elmo Airport, and within a 6.4-mile radius of the Airlake Airport, and within 3.3 miles each side of the 084° bearing from the Farmington VORTAC extending from the 6.4-mile radius to 14.8 miles east of the Airlake Airport.

**SPECIAL USE AIRSPACE****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MILITARY TRAINING ROUTES****2 Jul 2009 – 22 Oct 2009** No Major Changes.**MISCELLANEOUS****2 Jul 2009 – 22 Oct 2009** No Major Changes.



## SUPPLEMENTAL COMMUNICATION REFERENCE

Contained within this tabulation, and listed alphabetically by airport name, are all private-use airports charted on the U.S. IFR Enroute Low and High Altitude charts in the United States, having terminal approach and departure control facilities. Additionally, listed by country, are all Canadian and Mexican airports that appear on the U.S. IFR Enroute charts with approach and departure control services. All frequencies transmit and receive unless otherwise noted. Radials defining sectors are outbound from the facility.

## UNITED STATES

| FACILITY NAME  | CHART & PANEL   |
|--|-----------------|
| <b>Frankfort, IL (LL40)</b><br>Chicago App/Dep Con 133.1 285.6   | L-28H           |
| <b>Glasgow Industrial, MT (Ø7MT)</b><br>Salt Lake Center App/Dep Con 126.85 305.2                          | H-1E, 2F, L-13D |
| <b>USAF Academy Bullseye Aux Airstrip, CO (C09Ø)</b><br>ASOS 118.325                                       | L-10F           |
| <b>West Kentucky Airpark, KY (5KY3)</b><br>Memphis Center App/Dep Con 133.65 292.15                        | L-16I           |
| <b>William P Gwinn, FL (Ø6FA)</b><br>Gwinn Tower 120.4 314.6 (Mon-Fri 1300-2100Z)<br>Gnd Con 121.65 279.25 | H-8I, L-23C     |

## CANADA

| FACILITY NAME   | CHART & PANEL     |
|---|-------------------|
| <b>Abbotsford, BC (CYXX)</b><br>ATIS 119.8 (1500-0700Z)<br>Victoria Trml App/Dep Con 132.7 (Avbl on ground) 290.8<br>Tower 119.4 (Inner) 121.0 (Outer) 295.0 (1500-0700Z) Gnd Con 121.8<br>MF 119.4 295.0 (0700-1500Z) (Shape irregular to 4500')             | H-1B, L-12F       |
| <b>Amos/Magny, QC (CYEY)</b><br>Montreal Center App/Dep Con 125.9   | H-11B             |
| <b>Atikokan Muni, ON (CYIB)</b><br>MF 122.3 (5 NM to 4500' No ground station)   | L-14I             |
| <b>Barrie-Orillia (Lake Simcoe Rgnl), ON (CNB9)</b><br>AWOS 122.55 (Pvt)<br>Toronto Center App/Dep Con 124.025  | H-11B, L-31D      |
| <b>Bar River, ON (CPF2)</b><br>Toronto Center App/Dep Con 132.65  | L-31C             |
| <b>Bathurst, NB (CZBF)</b><br>Moncton Center App/Dep Con 134.25   | L-32J             |
| <b>Boundary Bay, BC (CZBB)</b><br>ATIS 125.5 (1500-0700Z)<br>Vancouver App/Dep Con 132.3 363.8<br>Tower 118.1 (Inner) 127.6 (Outer) (1500-0700Z) Gnd Con 124.3<br>MF 118.1 (0700-1500Z to 2000'. Vancouver Trml 125.2 above 2000'. Shape irregular to 2500'). | H-1B, L-1E        |
| <b>Brampton, ON (CNC3)</b><br>Toronto Trml App/Dep Con 119.3 253.1  | L-31D             |
| <b>Brandon Muni, MB (CYBR)</b><br>Winnipeg Center App/Dep Con 132.25 285.4<br>MF 122.1 (5 NM to 4000')  | H-2H              |
| <b>Brantford, ON (CYFD)</b><br>Toronto Trml App/Dep Con 128.27  | L-31D             |
| <b>Brockville-Thousand Islands Rgnl Tackaberry, ON (CNL3)</b><br>Montreal Center App/Dep Con 134.675  | L-32G             |
| <b>Bromont, QC (CZBM)</b><br>Montreal Center App/Dep Con 132.35 MF 122.15 (5 NM to 3400')   | L-32G             |
| <b>Burlington Airpark, ON (CZBA)</b><br>Toronto Center App/Dep Con 119.3 253.1  | L-31D             |
| <b>Castlegar, BC (CYCG)</b><br>Vancouver Center App/Dep Con 134.2 227.3<br>MF 122.1 (5 NM to 6500')   | H-1C              |
| <b>Centralia/James T. Fld Muni, ON (CYCE)</b><br>Toronto Center App/Dep Con 135.30  | H-10G, 11B, L-31D |
| <b>Charlottetown, PE (CYYG)</b><br>Moncton Center App/Dep Con 135.65 384.8 MF 118.0 (5 NM to 3200')   | H-11E, L-32J      |
| <b>Chatham-Kent, ON (CNZ3)</b><br>Cleveland Center App/Dep Con 132.25   | H-10G, L-30G      |

| FACILITY NAME  | CHART & PANEL     |
|--|-------------------|
| <b>Collingwood, ON (CNY3)</b><br>Toronto Center App/Dep Con 124.02   | H-11B, L-31D      |
| <b>Cornwall Rgnl, ON (CYCC)</b><br>Boston Center App/Dep Con 135.25 377.1  | L-32G             |
| <b>Cranbrook/Canadian Rockies Intl, BC (CYXC)</b><br>Vancouver Center App/Dep Con 133.6 MF 122.3 (5 NM to 6100')   | H-1C              |
| <b>Debert, NS (CCQ3)</b><br>Halifax Trml App/Dep Con 119.2   | H-11E, L-32J      |
| <b>Digby, NS (CYID)</b><br>Moncton Center App/Dep Con 123.9  | L-32J             |
| <b>Downsview, ON (CYZD)</b><br>Toronto Center App Con 133.4<br>Toronto Center Dep Con 133.4<br>MF 126.2 (3 NM to 1900')  | H-11B, L-31E      |
| <b>Drummondville, QC (CSC3)</b><br>Montreal Center App/Dep Con 132.35  | L-32H             |
| <b>Earlton (Timiskaming Rgnl), ON (CYXR)</b><br>MF 122.0 (5 NM to 3800')<br>AWOS 128.6   | H-11B             |
| <b>Elliot Lake Muni, ON (CYEL)</b><br>Toronto Center App/Dep Con 135.4   | L-31C             |
| <b>Fort Frances Muni, ON (CYAG)</b><br>Minneapolis Center App/Dep Con 120.9  | L-14H             |
| <b>Fredericton Intl, NB (CYFC)</b><br>ATIS 127.55<br>Moncton Center App/Dep Con 124.3 135.5 270.8 Clnc Del 121.7 (Ltd hrs)<br>MF 119.0 (5 NM to 3500')   | H-11E, L-32I      |
| <b>Goderich, ON (CYGD)</b><br>Toronto Center App/Dep 135.3 266.3   | H-11B, L-31D      |
| <b>Greenwood, NS (CYZX)</b><br>ATIS 128.85 244.3 (1100-0000Z‡)<br>App/Dep Con 120.6 335.9 Tower 119.5 126.2 236.6 324.3<br>Gnd Con 133.75 289.4 Clnc Del 128.05 283.9  | H-11E, L-32J      |
| <b>Grimsby Air Park, ON (CNZ8)</b><br>Toronto Trml App/Dep Con 128.27 268.75 Tower 125.0 308.475   | L-31E             |
| <b>Halifax/Shearwater, NS (CYAW)</b><br>ATIS 129.175 (Ltd hrs)<br>App/Dep Con 119.2 Tower 119.0 126.2 340.2 360.2 (Ltd hrs)<br>Gnd Con 121.7 250.1   | H-11E, L-32J      |
| <b>Halifax/Stanfield Intl, NS (CYHZ)</b><br>ATIS 121.0<br>Moncton Center App/Dep Con 118.7 119.2 128.55 135.3 225.2 363.8<br>Tower 118.4 236.6 Gnd Con 121.9 275.8 Clnc Del 123.95<br>Apron Advisory 122.125 | H-11E, L-32J      |
| <b>Hamilton, ON (CYHM)</b><br>ATIS 128.1<br>Toronto Trml App/Dep Con 128.27 268.75 Tower 119.7 125.0<br>Gnd Con 121.6  | H-10H, 11B, L-11B |
| <b>Kingston, ON (CYGK)</b><br>Montreal Center App/Dep Con 135.05 398.4 (0400-1115Z‡)<br>MF 122.5 (1115-0400Z‡ 5 NM to 3300')   | H-11C, L-31E, 32F |
| <b>Kitchener/Waterloo, ON (CYKF)</b><br>ATIS 125.1 (1200-0400Z‡)<br>Toronto Trml App/Dep Con 128.275<br>Waterloo Tower 126.0 118.55 (1200-0400Z‡) Gnd Con 121.8<br>MF 126.0 (0400-1200Z‡ 5 NM to 4000')      | H-11B, L-31D      |
| <b>Lachute, QC (CSE4)</b><br>Montreal Center App Con 124.65 132.85 268.3<br>Montreal Center Dep Con 132.85 268.3   | L-32G             |
| <b>La Tuque, QC (CYLQ)</b><br>Montreal Center App/Dep Con 134.5  | H-11C             |
| <b>Langley, BC (CYNJ)</b><br>ATIS 124.5 (1630-0230Z, DT 1530-0330Z)<br>Victoria Trml 132.7 290.8 Tower 119.0 (1630-0230Z, DT 1530-0330Z)<br>Gnd Con 121.9 MF 119.0 (0230-1630Z, DT 0330-1530Z 3 NM to 1900') | L-1E              |

| FACILITY NAME  | CHART & PANEL             |
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| <b>Leamington, ON (CLM2)</b><br>Cleveland Center App/Dep Con 132.45  | L-30F                     |
| <b>Lethbridge, AB (CYQL)</b><br>ATIS 124.4 (1300-0545Z‡)<br>Edmonton Center App/Dep Con 132.75 265.2 MF 121.0 (5 NM to 6000')  | H-1D                      |
| <b>Lindsay, ON (CNF4)</b><br>Toronto Center App/Dep 134.25   | L-31E, L-32F              |
| <b>Liverpool/South Shore Rgnl, NS (CYAU)</b><br>Moncton Center App/Dep Con 123.9   | L-32J                     |
| <b>London, ON (CYXU)</b><br>ATIS 127.8 (1120-0345Z‡)<br>Toronto Center App/Dep 135.3 135.625<br>Tower 119.4 125.65 (1120-0345Z‡) Gnd Con 121.9<br>MF 119.4 (0345-1120Z‡ 5 NM to 3000')   | H-10G, 11B,<br>L-30G, 31D |
| <b>Manitowaning/Manitoulin East Muni, ON (CYEM)</b><br>Toronto Center App/Dep 135.4 260.9  | L-31C                     |
| <b>Maniwaki, QC (CYMW)</b><br>Montreal Center App/Dep Con 126.57   | L-32G                     |
| <b>Mascouche, QC (CSK3)</b><br>MF 122.35 (5 NM to 2500'. No gnd station. Excluding the portion S of the<br>N shore of Riviere des Milles-Iles and 1 NM around Lac Agile Mascouche arpt.)   | L-32G                     |
| <b>Medicine Hat, AB (CYXH)</b><br>AWOS 124.875 (0345-1245Z‡)<br>MF 122.2 (1245-0345Z‡ 5 NM to 5400')   | H-1D                      |
| <b>Midland/Huronina, ON (CYEE)</b><br>Toronto Center App/Dep 124.025   | L-31D                     |
| <b>Miramichi, NB (CYCH)</b><br>Moncton Center App/Dep Con 123.7  | H-11E, L-32J              |
| <b>Moncton/Greater Moncton Intl, NB (CYQM)</b><br>ATIS 128.65<br>App/Dep 124.4 Tower 120.8 236.6 Gnd Con 121.8 275.8<br>Apron Advisory 122.075   | H-11E, L-32J              |
| <b>Mont-Laurier, QC (CSD4)</b><br>Montreal Center App/Dep Con 126.57   | L-32G                     |
| <b>Montreal Intl (Mirabel), QC (CYMX)</b><br>ATIS 125.7<br>Montreal Center App Con 124.65 132.85 268.3<br>Montreal Dep Con 132.85<br>MF 119.1 (7 NM shape irregular to 2000') VFR Advisory 134.15  | H-11C, 12K, L-32G         |
| <b>Montreal/Pierre Elliott Trudeau Intl, QC (CYUL)</b><br>ATIS 133.7<br>Montreal Trml App Con 118.9 124.65 126.9 132.85 268.3<br>Tower 119.9 267.1 Gnd Con 121.9 275.8 Clnc Del 125.6 Apron 122.075<br>Montreal Trml Dep Con 118.9 (SE-S-SW) 124.65 268.3 (W-NW-NE)<br>VFR Advisory 134.15   | H-11C, 12K, L-32G         |
| <b>Montreal/St-Hubert, QC (CYHU)</b><br>ATIS 124.9 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z) AWOS 124.9<br>Montreal Center App/Dep Con 125.15 268.3<br>St. Hubert Tower 118.4 (Apr-Oct 1045-0500Z‡, Nov-Mar 1045-0400Z)<br>Gnd Con 126.4 MF 118.4 (Apr-Oct 0500-1045Z‡, Nov-Mar<br>0400-1045Z 5 NM shape irregular to 2500') VFR Advisory 134.15 | H-11C, L-32G              |
| <b>Muskoka, ON (CYQA)</b><br>AWOS 124.575<br>MF 122.3 (5 NM to 3900')  | H-11B, L-31D              |
| <b>Nanaimo, BC (CYCD)</b><br>Victoria Trml App/Dep 120.8 133.95 252.3 MF 122.1 1330-0530Z‡ (5 NM to 2500')   | H-1B, L-1E                |
| <b>North Bay, ON (CYYB)</b><br>ATIS 124.9 (1130-0300Z‡)<br>Toronto Center App/Dep 121.225 127.25<br>MF 118.3 (1130-0330Z‡ 7 NM to 5000')   | L-31E                     |
| <b>Oshawa, ON (CYOO)</b><br>ATIS 125.675 (1130-0330Z‡)<br>Toronto Trml App Con 133.4<br>Tower 120.1 (1130-0330Z‡) Gnd Con 118.4<br>Toronto Trml Dep Con 133.4 MF 120.1 (0330-1130Z‡ 5 NM to 3000')   | H-11B, L31D               |

| FACILITY NAME   | CHART & PANEL     |
|---|-------------------|
| <b>Ottawa/Carp, ON (CYRP)</b><br>ATIS 121.15<br>Ottawa Trml App/Dep Con 128.175 252.5   | L-31E, 32F        |
| <b>Ottawa/Gatineau, QC (CYND)</b><br>Ottawa Trml App/Dep Con 127.7 128.175 252.5<br>MF 122.3 (5 NM shape irregular to 2500')<br>VFR Advisory Ottawa Trml 127.7  | H-11C, L-32G      |
| <b>Ottawa/MacDonald-Cartier Intl, ON (CYOW)</b><br>ATIS 121.15<br>Ottawa App Con 135.15 Tower 118.8 120.1 341.3<br>Gnd Con 121.9 CInc Del 119.4<br>Ottawa Dep Con 128.175   | L-11C             |
| <b>Owen Sound/Billy Bishop Rgnl, ON (CYOS)</b><br>Toronto Center App/Dep 132.575 290.6  | L-31D             |
| <b>Pelee Island, ON (CYPT)</b><br>Cleveland Center App/Dep Con 126.35 360.0   | L-30F             |
| <b>Pembroke, ON (CYTA)</b><br>Montreal Center App/Dep Con 135.2<br>Petawawa Advisory 126.4 250.1 (Mon-Fri 1300-2130Z†, OT PPR)  | H-11C, L-31E, 32F |
| <b>Penticton, BC (CYYF)</b><br>Vancouver Center App/Dep Con 133.5 351.3 MF 118.5 (5 NM to 4100')  | H-1B              |
| <b>Peterborough, ON (CYPQ)</b><br>AWOS 126.925<br>Toronto Center App/Dep 134.25   | H-11B, L-31E, 32F |
| <b>Pincher Creek, AB (CZPC)</b><br>Edmonton Center App/Dep Con 132.75 265.2   | H-1D              |
| <b>Pitt Meadows, BC (CYPK)</b><br>ATIS 125.0 (1500-0700Z†)<br>Vancouver Center App Con 128.6 352.7 (Outer)<br>Pitt Tower 126.3 (1500-0700Z†) Gnd Con 123.8<br>Vancouver Center Dep Con 132.3 363.8 (South)<br>MF 126.3 (0700-1500Z†) (3NM to 2500') | L-1E              |
| <b>Quebec/Jean Lesage Intl, QC (CYQB)</b><br>ATIS 134.6<br>Montreal Center App/Dep Con 124.0 127.85 135.025 270.9 322.8<br>(185.65 Quebec Twr VFR acft at or below 3000') Tower 118.65 236.6<br>Gnd Con 121.9 250.0                                 | H-11D, L-32H      |
| <b>Riviere Du Loup, QC (CYRI)</b><br>AWOS 122.025 (Pvt)<br>Montreal Center App/Dep Con 125.1 299.6  | H-11D             |
| <b>Rouyn Noranda, QC (CYUY)</b><br>Montreal Center App/Dep Con 125.9<br>MF 122.2 (5 NM to 4000')  | H-11B             |
| <b>Saint John, NB (CYSJ)</b><br>Moncton Center App/Dep Con 124.3 135.5 270.8 MF 118.5 (5 NM to 3400')   | H-11E, L-32J      |
| <b>Sarnia (Chris Hadfield), ON (CYZR)</b><br>Toronto Center 134.375   | H-10G, 11B, L-30F |
| <b>Sault Ste Marie, ON (CYAM)</b><br>ATIS 133.05 (1300-0100Z†)<br>Toronto Center App/Dep Con 132.65 344.5<br>Tower 118.8 (1300-0100Z†) Gnd Con 121.7<br>MF 118.8 (0100-1300Z† 5 NM irregular shape to 3000')  | H-2K, L-31B       |
| <b>Sherbrooke, QC (CYAM)</b><br>AWOS 126.25<br>Montreal Center App/Dep Con 132.55 MF 123.5 (Ltd hrs 5 NM to 3800')  | H-11D, L-32H      |
| <b>South Renfrew Muni, ON (CNP3)</b><br>Montreal Center App/Dep 124.275   | L-31E, 32F        |
| <b>Southport, MB (CYPG)</b><br>ATIS 120.85 (Mon-Fri 1400-2300Z† except holidays)<br>Tower 126.2 384.2 (Mon-Fri 1400-2300Z† except holidays)<br>Gnd Con 121.7 275.8  | H-2H              |

| FACILITY NAME  | CHART & PANEL     |
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| <b>Springwater Barrie Airport, ON (CNA3)</b><br>Toronto Center App/Dep Con 124.025   | L-31D             |
| <b>St. Catharines/Niagara District, ON (CYSN)</b><br>ATIS 128.525 (1215-0200Z‡)<br>Toronto Trml App/Dep Con 133.4 253.1<br>MF 123.25 (1215-0200Z‡ 5 NM to 3300')   | H-10H, 11B, L-31E |
| <b>St. Frederic, QC (CSZ4)</b><br>Montreal Center App/Dep Con 135.025 270.9  | L-32H             |
| <b>St. Georges, QC (CYSG)</b><br>Montreal Center App/Dep Con 132.35<br>MF 122.15 (5 NM 3900' ASL)  | H-32H, L-11D      |
| <b>St. Jean, QC (CYJN)</b><br>Montreal Center App/Dep Con 125.15 268.3<br>Tower 118.2 (Apr-Oct 1230-0230Z‡ Nov-Mar 1300-0200Z‡)<br>Gnd Con 121.7   | L-32G             |
| <b>Sudbury, ON (CYSB)</b><br>ATIS 127.4<br>Toronto Center App/Dep Con 135.5<br>MF 125.5 (7 NM to 4000')  | H-31B, 10G, L-31D |
| <b>Summerside, PE (CYSU)</b><br>AWOS 122.55 (Pvt)<br>Moncton Center App/Dep Con 124.4 384.8  | H-11E, L-32J      |
| <b>Thunder Bay, ON (CYQT)</b><br>ATIS 128.8 (1100-0400Z‡)<br>Winnipeg Center App/Dep Con 132.125 (0400-1100Z‡)<br>Tower 118.1 (1100-0400Z‡) Gnd Con 121.9<br>App/Dep 119.2 MF 118.1 (0400-1100Z‡ 5 NM to 4000')  | H-2J, L-14J       |
| <b>Timmins, ON (CYTS)</b><br>ATIS 124.95 (1000-0500Z‡)<br>Toronto Center App/Dep Con 128.3 226.3 MF 122.3 (5 NM to 4000')  | H-11B             |
| <b>Toronto/Buttonville Muni, ON (CYKZ)</b><br>ATIS 127.1 (1200-0400Z‡)<br>Toronto Center App Con 133.4 Toronto Center Dep Con 133.4<br>Tower 124.8 119.9 (1200-0400Z‡) Gnd Con 121.8<br>MF 124.8 (0400-1200Z‡ No gnd station. 5 NM shape irregular to below 2500')                                     | L-31E             |
| <b>Toronto/City Centre, ON (CYTZ)</b><br>ATIS 133.6 (1130-0400Z‡)<br>App Con 133.4 Dep Con 133.4<br>Tower 118.2 119.2 226.5 (1130-0400Z‡) Gnd Con 121.7  | L-31E             |
| <b>Toronto/Lester B Pearson Intl, ON (YYZ)</b><br>ATIS 120.825<br>App Con 124.475 125.4 132.8 Dep Con 127.575 128.8<br>Tower 118.35 118.7 Gnd Con 118.0 119.1 121.65 121.9<br>Clnc Del 121.3 (1200-0400Z‡) VFR Advisory 119.3 133.4  | H-11B, L-31D      |
| <b>Trenton, ON (CYTR)</b><br>ATIS 135.45 257.7<br>App/Dep Con 128.4 324.3 Tower 128.7 236.6 Gnd Con 121.9 275.8<br>Clnc Del 124.35 286.4   | H-11C, L-31E, 32F |
| <b>Trenton/Mountain View, ON (CPZ3)</b><br>Trenton Mil Advisory 268.0  | H-11C, L-31E, 32F |
| <b>Trois-Rivieres, QC (CYRQ)</b><br>Montreal Center App/Dep Con 128.225 229.2<br>MF 123.0 (5 NM to 3200')  | H-11C, L-32H      |
| <b>Val-d'Or, QC (CYVO)</b><br>Montreal Center App/Dep Con 125.9 308.3<br>MF 118.5 (1030-0325Z‡ 5 NM to 4000')  | H-11B             |
| <b>Vancouver Intl, BC (CYVR)</b><br>ATIS 124.6 124.75<br>App Con 128.6 128.17 352.7 (Outer) 133.1 134.225 352.7 (Inner)<br>Dep Con 126.125 (north) 132.3 (south) 363.8<br>Tower 118.7 (south) 119.55 (north) VFR 124.0 125.65 226.5 236.6<br>Gnd Con 121.7 (south) 127.15 (north) 275.8 Clnc Del 121.4 | H-1B, L-1E        |

| FACILITY NAME  | CHART & PANEL |
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| <b>Victoria Intl, BC (CYYJ)</b><br>ATIS 118.8 (1400-0800Z‡)<br>App Con 125.95 308.4 Dep Con 133.85 308.4<br>Tower 119.1 (Outer) 119.7 (Inner) 239.6<br>Gnd Con 121.9 361.4 (1400-0800Z‡ OT ctc Kamloops 119.7)<br>Clncl Del 126.4 (1400-0800Z‡)            | H-1B, L-1E    |
| <b>Victoriaville, QC (CSR3)</b><br>Montreal Center App Con 132.35  | L-32H         |
| <b>Waterville/Kings Co Muni, NS (CCW3)</b><br>Greenwood Trml App/Dep Con 120.6 335.9<br>Greenwood Tower 119.5 324.3  | L-32J         |
| <b>Warton, ON (CYVW)</b><br>Toronto Center App/Dep Con 132.575<br>MF 122.2 (5 NM to 3700')   | H-11B, L-31D  |
| <b>Windsor, ON (CYQG)</b><br>ATIS 134.5 (1130-0330Z‡)<br>Detroit App/Dep Con 126.85 127.5 134.3 348.3 363.2<br>Tower 124.7 (1130-0330Z‡) Gnd Con 121.7<br>MF 124.7 (0330-1130Z‡ 6 NM irregular shape to below 3000')<br>VFR Advisory Detroit App Con 134.3 | H-10G, L-8J   |
| <b>Yarmouth, NS (CYQI)</b><br>Moncton Center App/Dep Con 123.9 368.5 MF 123.0 (5 NM to 3100')  | H-11E, L-32I  |

## MEXICO

| FACILITY NAME  | CHART & PANEL  |
|--|----------------|
| <b>Abraham Gonzalez Intl (MMCS)</b><br>Juarez App Con 119.9 Juarez Tower 118.9   | H-4K, L-6F     |
| <b>Del Norte Intl (MMAN)</b><br>ATIS 127.55 (1300-0300Z‡)<br>Monterrey App 119.75 120.4 Tower 118.6  | H-7B, L-20G    |
| <b>Durango Intl (MMDO)</b><br>ATIS 132.1<br>Tower 118.1 Durango Info 122.3   | H-7A           |
| <b>General Abelardo L. Rodriguez Intl (MMTJ)</b><br>ATIS 127.9<br>Tijuana App Con 119.5 120.3 Tijuana Tower 118.1 Clncl Del 122.35<br>Tijuana Info 132.1 | H-4H, L-4H     |
| <b>General Lucio Blanco Intl (MMRX)</b><br>Reynosa App Con 118.8 Reynosa Tower 118.8   | H-7B, L-20H    |
| <b>General Mariano Escobedo Intl (MMMY)</b><br>ATIS 127.7<br>Monterrey App Con 119.75 120.4 Monterrey Tower 118.1 Gnd Con 121.9                          | H-7B, L-20G    |
| <b>General R Fierro Villalobos Intl (MMCU)</b><br>ATIS 127.9<br>Chihuahua App Con 121.0 Chihuahua Tower 118.4  | L-6I           |
| <b>General Rodolfo Sanchez Taboada Intl (MMML)</b><br>ATIS 127.6<br>Mexicali App Con 118.2 Mexicali Tower 118.2 Mexicali Info 123.9 122.3                | H-4H, L-4J, 5A |
| <b>General Servando Canales (MMMA)</b><br>Matamoros App Con 118.0 Matamoros Tower 118.0  | H-7C, L-21A    |
| <b>Plan De Guadalupe Intl (MMIO)</b><br>Saltillo App Con 127.4 Saltillo Tower 118.4  | H-7B           |
| <b>Quetzalcoatl Intl (MMNL)</b><br>Nuevo Laredo App Con 118.3 Nuevo Laredo Tower 118.3   | H-7B, L-20G    |
| <b>Torreon Intl (MMTC)</b><br>App Con 119.6 Tower 118.5  | H-7A           |

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




In support of the Federal Aviation Administration's Runway Incursion Program, selected towered airport diagrams have been published in the Airport Diagram section of the A/FD. Diagrams will be listed alphabetically by associated city and airport name. Airport diagrams, depicting runway and taxiway configurations, will assist both VFR and IFR pilots in ground taxi operations. The airport diagrams in this publication are the same as those published in the U.S. Terminal Procedures Publications. For additional airport diagram legend information see the U.S. Terminal Procedures Publication.

NOTE: Some text data published under the individual airport in the front portion of the A/FD may be more current than the data published on the Airport Diagrams. The airport diagrams are updated only when significant changes occur.

## GENERAL INFORMATION





### PILOT CONTROLLED AIRPORT LIGHTING SYSTEMS

Available pilot controlled lighting (PCL) systems are indicated as follows:

1. Approach lighting systems that bear a system identification are symbolized using negative symbology, e.g., , , .
2. Approach lighting systems that do not bear a system identification are indicated with a negative "0" beside the name. A star (★) indicates non-standard PCL, consult the individual airport in the front portion of the A/FD, e.g., ★. To activate lights use frequency indicated in the communication section of the chart with a  or the appropriate lighting system identification e.g., UNICOM 122.8 , , .

| <u>KEY MIKE</u>          | <u>FUNCTION</u>                                     |
|--------------------------|---|
| 7 times within 5 seconds | Highest intensity available                         |
| 5 times within 5 seconds | Medium or lower intensity (Lower REIL or REIL-off)  |
| 3 times within 5 seconds | Lowest intensity available (Lower REIL or REIL-off) |

### CHART CURRENCY INFORMATION

FAA procedure amendment number  Amdt 11A 99365  Date of latest change  
 Orig 00365 

The Chart Date identifies the Julian date the chart was added to the volume or last revised for any reason. The first two digits indicate the year, the last three digits indicate the day of the year (001 to 365/6) in which the latest addition or change was first published.

The Procedure Amendment Number precedes the Chart Date, and changes any time instrument information (e.g., DH, MDA, approach routing, etc.) changes. Procedure changes also cause the Chart Date to change.

### MISCELLANEOUS

- ★ Indicates a non-continuously operating facility, see the individual airport in the front portion of the A/FD.
- # Indicates control tower temporarily closed UFN.



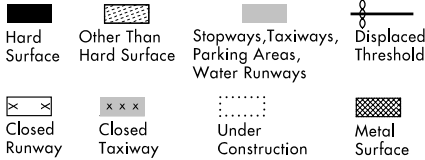
09071

# LEGEND

## INSTRUMENT APPROACH PROCEDURES (CHARTS)

### AIRPORT DIAGRAM

#### Runways



**ARRESTING GEAR:** Specific arresting gear systems; e.g., BAK12, MA-1A etc., shown on airport diagrams, not applicable to Civil Pilots. Military Pilots refer to appropriate DOD publications.



#### ARRESTING SYSTEM

#### REFERENCE FEATURES

|                       |   |
|-----------------------|---|
| Buildings.....        | ■ |
| Tanks.....            | ● |
| Obstructions.....     | ▲ |
| Airport Beacon #..... | ☆ |
| Runway                |   |
| Radar Reflectors..... | ▼ |
| Control Tower #.....  | ■ |
| Hot Spot.....         | ○ |

# When Control Tower and Rotating Beacon are co-located, Beacon symbol will be used and further identified as TWR.

Runway length depicted is the physical length of the runway (end-to-end, including displaced thresholds if any) but excluding areas designated as stopways.

A **D** symbol is shown to indicate runway declared distance information available, see appropriate A/FD, Alaska or Pacific Supplement for distance information.

Runway Weight Bearing Capacity/or PCN Pavement Classification Number is shown as a codified expression.

Refer to the appropriate Supplement/Directory for applicable codes e.g., RWY 14-32 S75, T185, ST175, TT325  
PCN 80 F/D/X/U

Helicopter Alighting Areas ① ⊕ ⊕ ⊕ ⊕

Negative Symbols used to identify Copter Procedures landing point..... ⊖ ⊕ ⊕ ⊕ ⊕

Runway Threshold elevation.....THRE 123

Runway TDZ elevation.....TDZE 123

Runway Slope.....0.3% DOWN

(shown when runway slope is greater than or equal to 0.3%)

NOTE:

Runway Slope measured to midpoint on runways 8000 feet or longer.

U.S. Navy Optical Landing System (OLS) "OLS" location is shown because of its height of approximately 7 feet and proximity to edge of runway may create an obstruction for some types of aircraft.

Approach light symbols are shown in the Flight Information Handbook.

Airport diagram scales are variable.

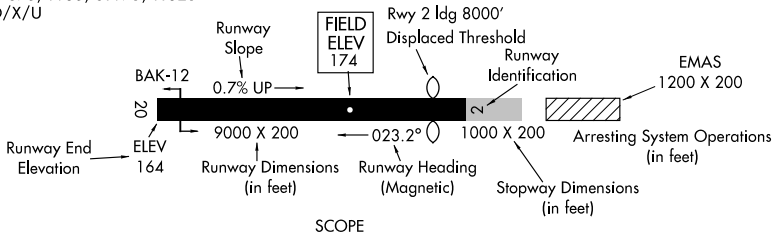
True/magnetic North orientation may vary from diagram to diagram

Coordinate values are shown in 1 or ½ minute increments. They are further broken down into 6 second ticks, within each 1 minute increments.

Positional accuracy within ±600 feet unless otherwise noted on the chart.

NOTE:

All new and revised airport diagrams are shown referenced to the World Geodetic System (WGS) (noted on appropriate diagram), and may not be compatible with local coordinates published in FUP. (Foreign Only)



Airport diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway/taxiway configurations and provide information for updating Computer Based Navigation Systems (I.E., INS, GPS) aboard aircraft. Airport diagrams are not intended to be used for approach and landing or departure operations. For revisions to Airport Diagrams: Consult FAA Order 7910.4.

# LEGEND

## HOT SPOTS

An "Airport surface hot spot" is a location on an aerodrome movement area with a history or potential risk of collision or runway incursion, and where heightened attention by pilots/drivers is necessary.

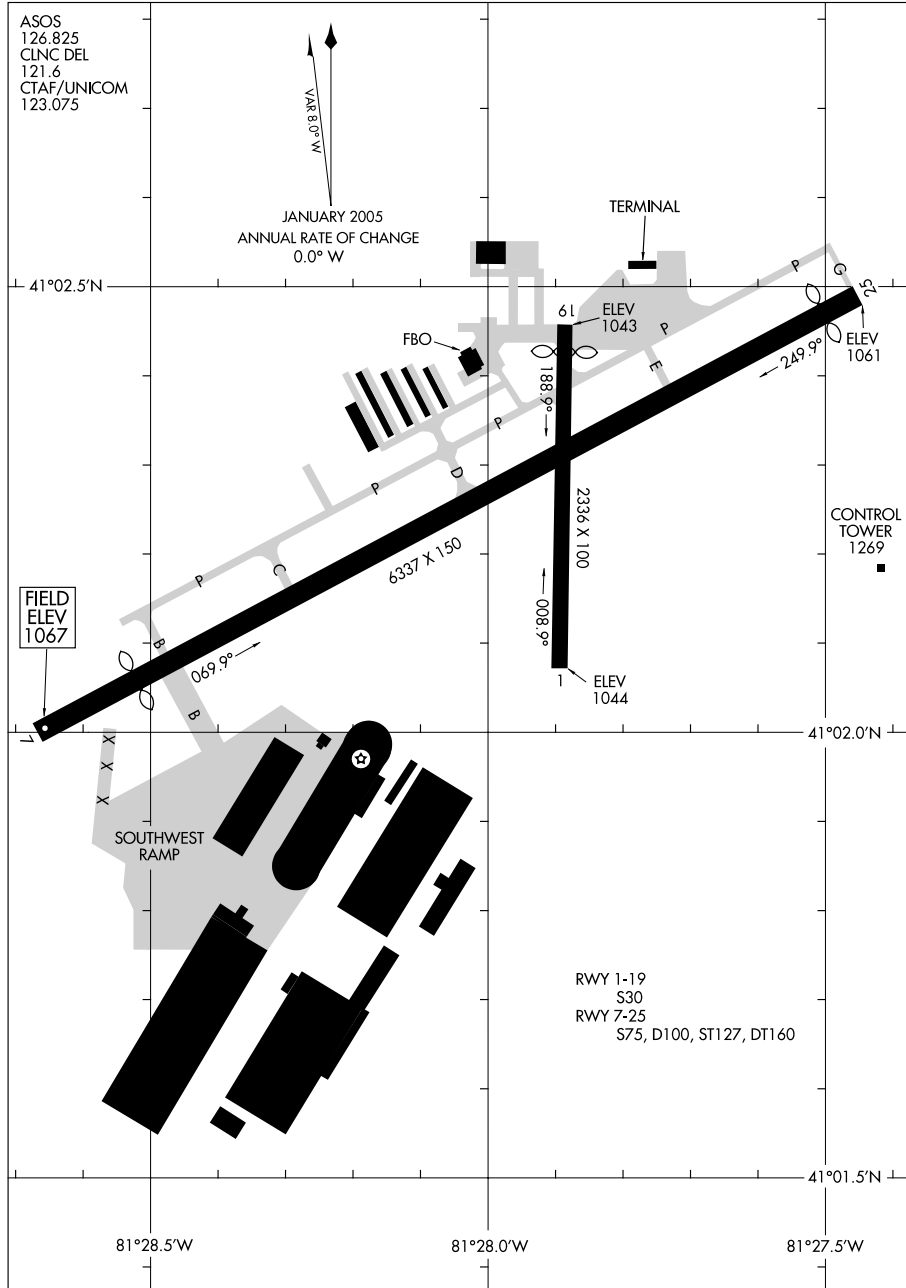
A "hot spot" is a runway safety related problem area on an airport that presents increased risk during surface operations. Typically it is a complex or confusing taxiway/taxiway or taxiway/runway intersection. The area of increased risk has either a history of or potential for runway incursions or surface incidents, due to a variety of causes, such as but not limited to: airport layout, traffic flow, airport marking, signage and lighting, situational awareness and training. Hot spots are depicted on airport diagrams as open circles or polygons designated as "HOT<sup>1</sup>", "HOT<sup>2</sup>", etc. and tabulated in the list below with a brief description of each hot spot. Hot spots will remain charted on airport diagrams until such time the increased risk has been reduced or eliminated.

| CITY/AIRPORT                                | HOT SPOT         | DESCRIPTION   |
|---|------------------|---|
| <b>ILLINOIS</b>                             |                  |   |
| MOLINE<br>QUAD CITY INTL (MLI)              | HOT <sup>1</sup> | Rwy 31 Non-standard hold position. Distance to edge of rwy 698'.  |
| <b>INDIANA</b>                              |                  |   |
| EVANSVILLE<br>EVANSVILLE RGNL (EVV)         | HOT <sup>1</sup> | Pilots taxiing to Rwy 09 enter the rwy mid-field. Do not taxi to the "numbers" without ATC clearance. Rwy 09-27 is a short distance from the General Aviation Ramp-use appropriate vigilance.   |
|   | HOT <sup>2</sup> | Pilots cleared to taxi to Rwy 27 sometimes enter the Rwy 27 without a clearance.  |
|   | HOT <sup>3</sup> | Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance.  |
|   | HOT <sup>4</sup> | Rwy 18-36 in close proximity to General Aviation Ramp-use appropriate vigilance.  |
| <b>MICHIGAN</b>                             |                  |   |
| JACKSON<br>JACKSON CO-REYNOLDS FLD (JXN)    | HOT <sup>1</sup> | Caution confusing signage.  |
|   | HOT <sup>2</sup> | No signage.   |
| <b>WISCONSIN</b>                            |                  |   |
| JANESVILLE<br>SOUTHERN WISCONSIN RGNL (JVL) | HOT <sup>1</sup> | Rwy 32 and Rwy 36 approach ends are closely aligned and may be confused when lining up for departure.   |
| MILWAUKEE<br>GENERAL MITCHELL INTL (MKE)    | HOT <sup>1</sup> | Pilots taxiing northbound on Twy E for an intersection departure on Rwy 19R at Twy V can end up entering Rwy 7L-25R if they miss the right turn for Twy V. To avoid a runway incursion, pilots on Twy E should use extreme caution approaching Rwy 7L-25R.  |
|   | HOT <sup>2</sup> | Runway holding position markings for the approach end of Rwy 25L are not where you expect them to be - they are well removed from the Rwy 25L entry point. Aircraft taxiing for a Rwy 25L departure on either Twy M or Rwy 13-31, note the positions of the Rwy 25L runway holding position markings. |
|   | HOT <sup>3</sup> | Use caution in the area of Twy M and Rwy 1L-19R. Pavement widens out as the taxiway approaches the runway and may cause confusion.  |

09071

## AIRPORT DIAGRAM

AL-6 (FAA)

AKRON FULTON INTL (AKR)  
AKRON, OHIO

## AIRPORT DIAGRAM

09071

AKRON, OHIO  
AKRON FULTON INTL (AKR)

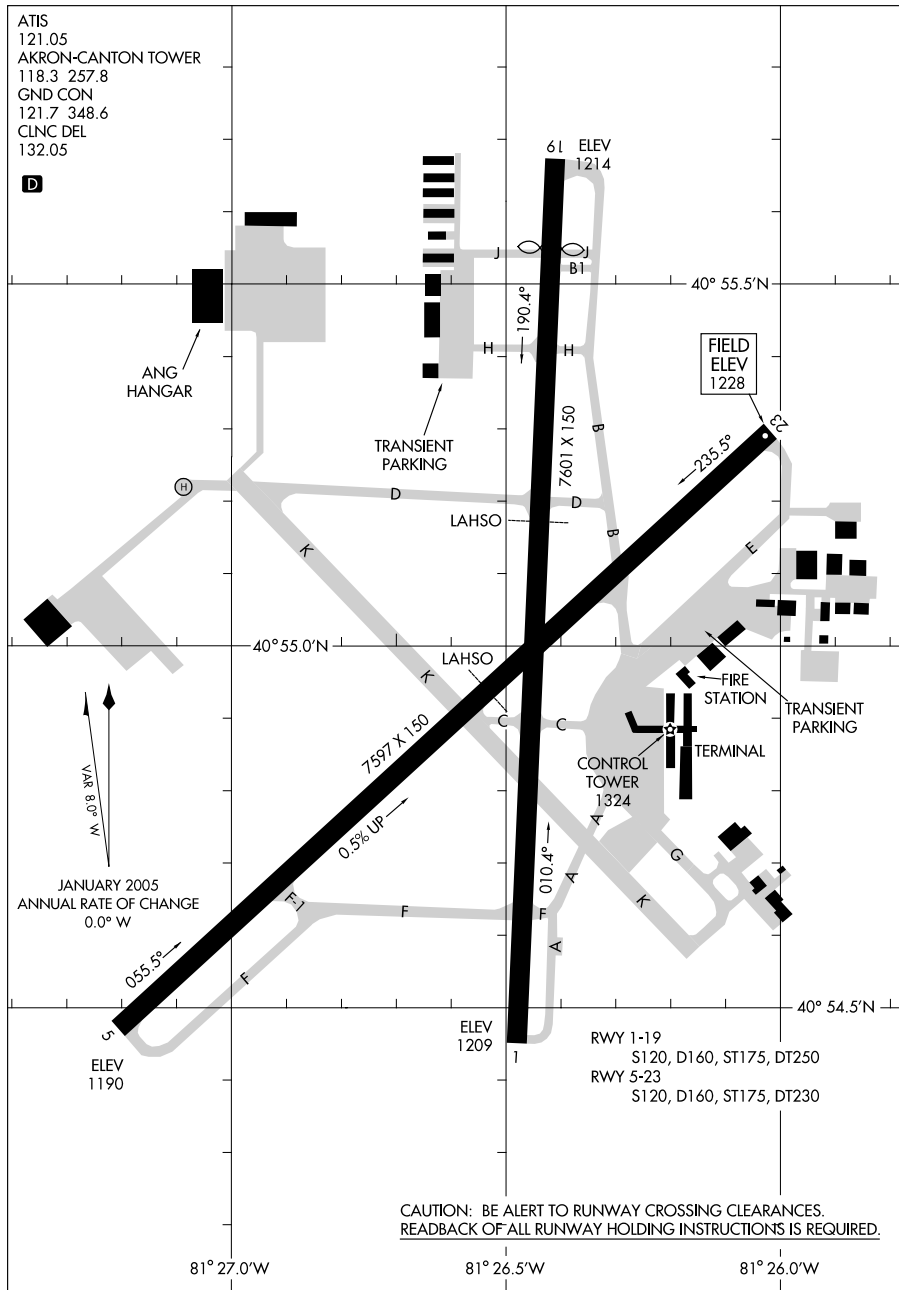
09015

## AIRPORT DIAGRAM

AL-638 (FAA)

AKRON-CANTON RGNL (CAK)

AKRON, OHIO



## AIRPORT DIAGRAM

09015

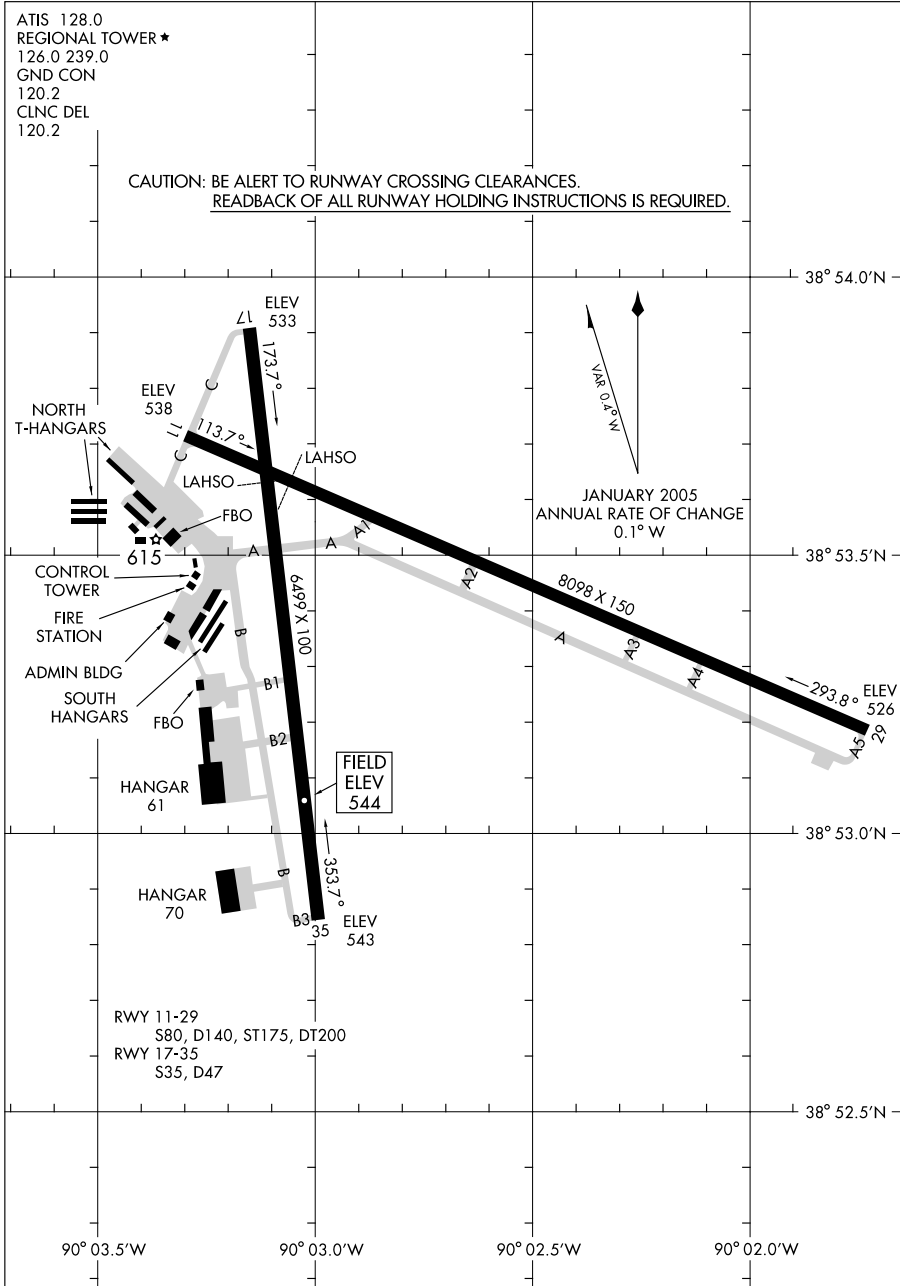
AKRON, OHIO  
AKRON-CANTON RGNL (CAK)

08269

# AIRPORT DIAGRAM

AL-5178 (FAA)

ALTON/ST. LOUIS RGNL (ALN)  
ALTON/ST. LOUIS, ILLINOIS



# AIRPORT DIAGRAM

08269

ALTON/ST. LOUIS, ILLINOIS  
ALTON/ST. LOUIS RGNL (ALN)

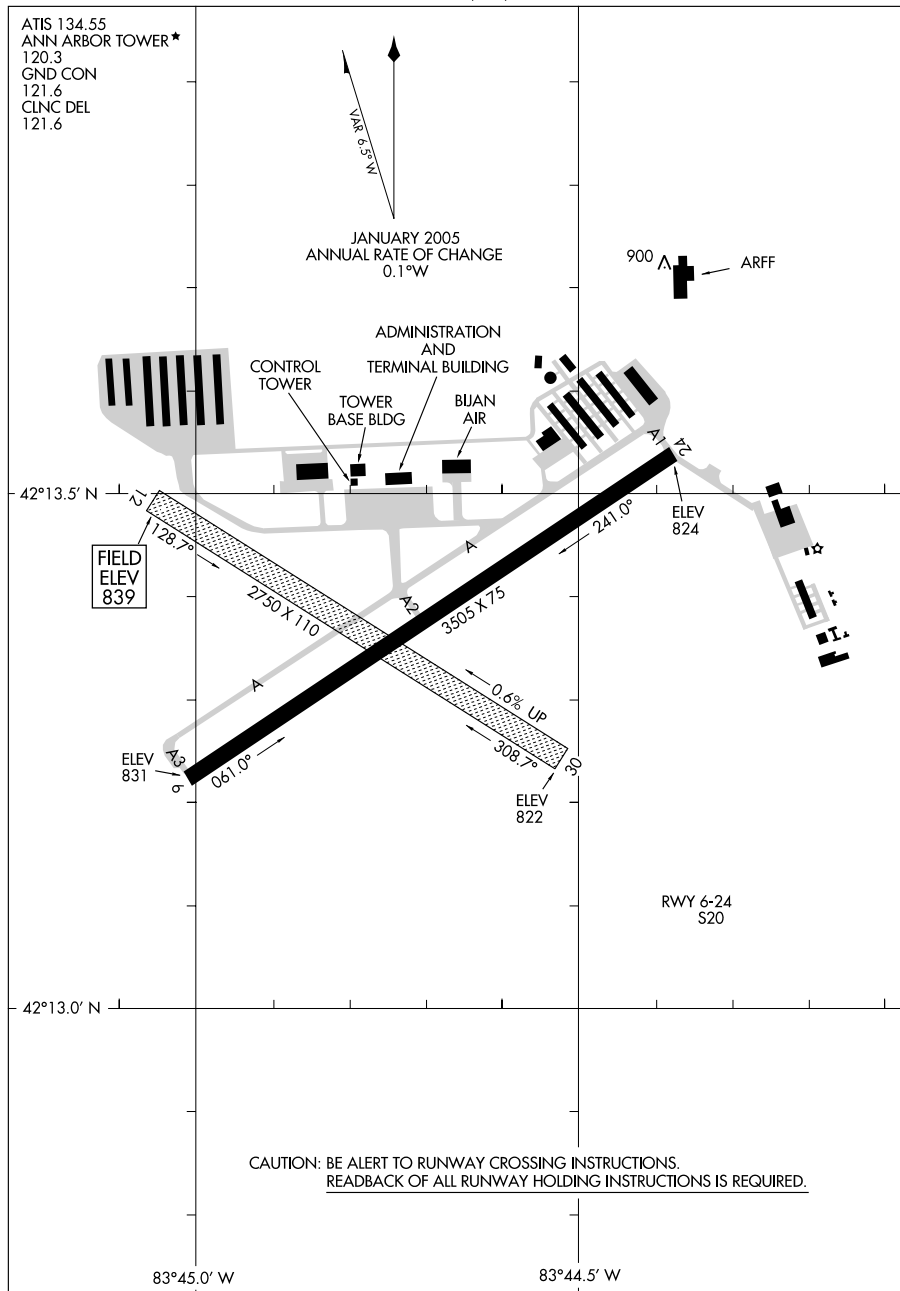
08045

## AIRPORT DIAGRAM

AL-5506 (FAA)

ANN ARBOR MUNI (ARB)

ANN ARBOR, MICHIGAN



## AIRPORT DIAGRAM

08045

ANN ARBOR, MICHIGAN  
ANN ARBOR MUNI (ARB)

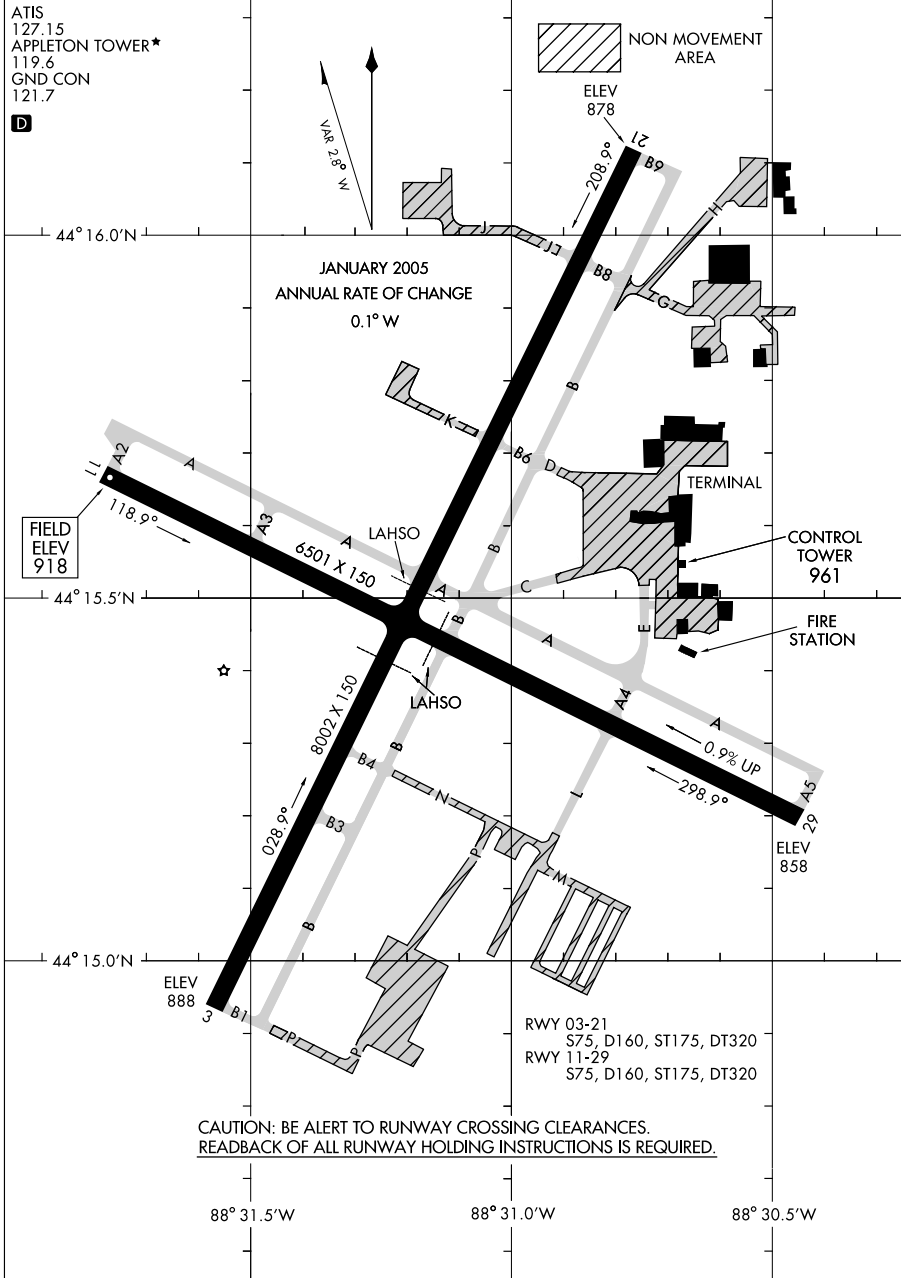
09295

## AIRPORT DIAGRAM

APPLETON/OUTAGAMIE COUNTY RGNL (ATW)

AL-5216 (FAA)

APPLETON, WISCONSIN



## AIRPORT DIAGRAM

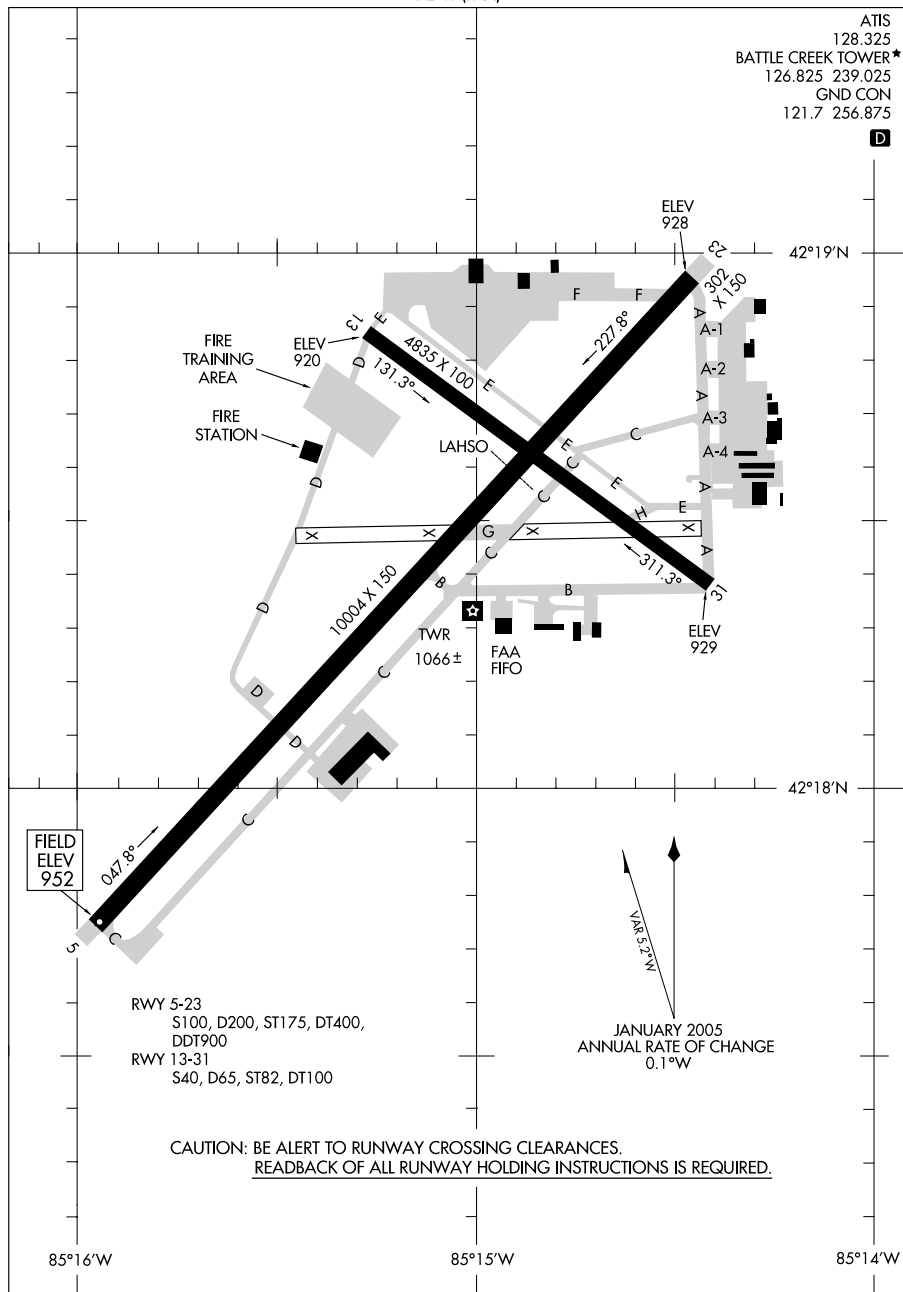
09295

APPLETON, WISCONSIN  
APPLETON/OUTAGAMIE COUNTY RGNL (ATW)

09295

## AIRPORT DIAGRAM

AL-41 (FAA)

BATTLE CREEK/ W.K. KELLOGG (BTL)  
BATTLE CREEK, MICHIGAN

## AIRPORT DIAGRAM

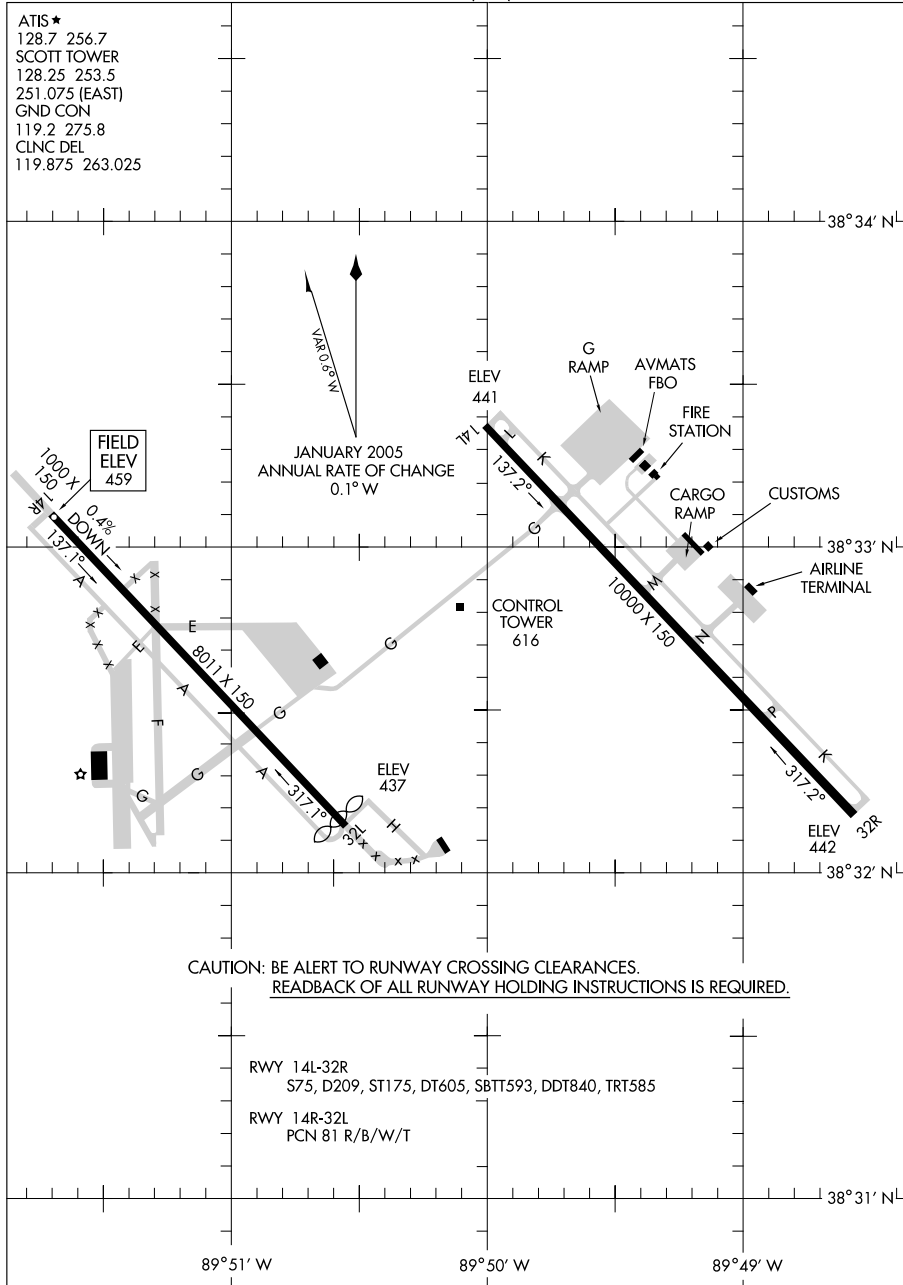
09295

BATTLE CREEK, MICHIGAN  
BATTLE CREEK/ W.K. KELLOGG (BTL)



09239

## AIRPORT DIAGRAM

 BELLEVILLE/SCOTT AFB/MIDAMERICA (BLV)  
 AL-46 (FAA) BELLEVILLE, ILLINOIS


## AIRPORT DIAGRAM

09239

 BELLEVILLE, ILLINOIS  
 BELLEVILLE/SCOTT AFB/MIDAMERICA (BLV)

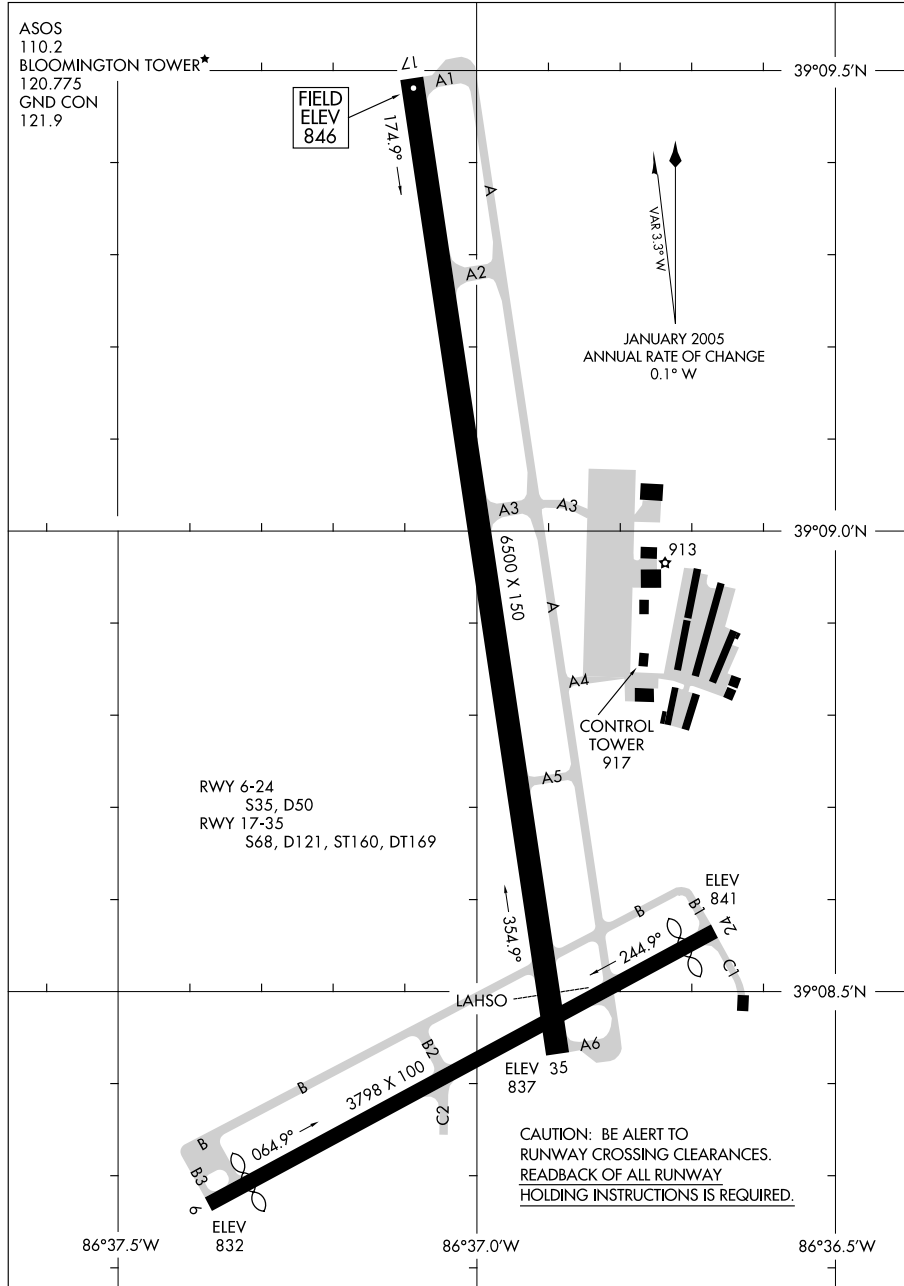


09295

# AIRPORT DIAGRAM

BLOOMINGTON / MONROE COUNTY (BMG)  
BLOOMINGTON, INDIANA

AL-5168 (FAA)



# AIRPORT DIAGRAM

09295

BLOOMINGTON, INDIANA  
BLOOMINGTON / MONROE COUNTY (BMG)

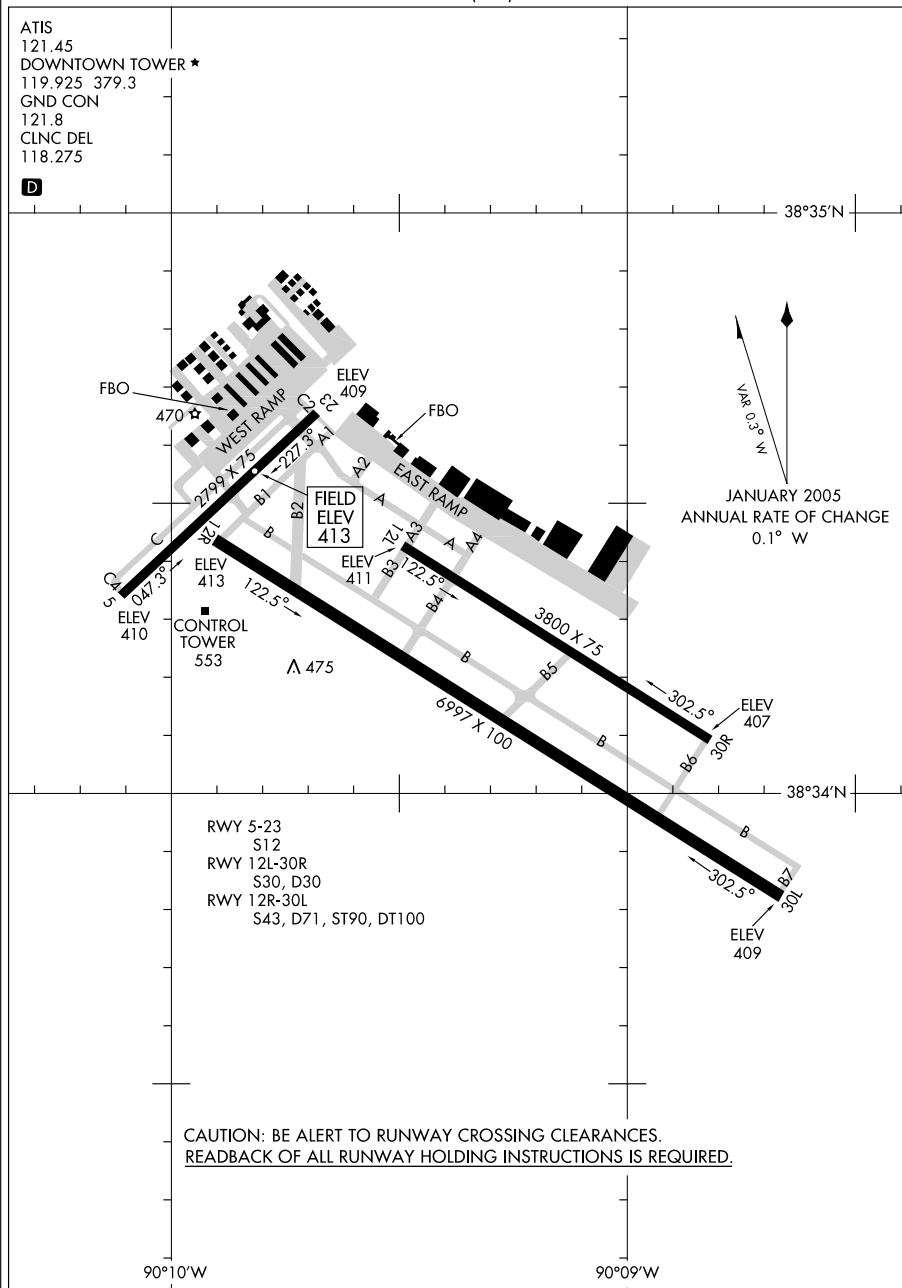
09295

## AIRPORT DIAGRAM

AL-5316 (FAA)

CAHOKIA/ ST. LOUIS DOWNTOWN (CPS)

CAHOKIA/ST. LOUIS, ILLINOIS



## AIRPORT DIAGRAM

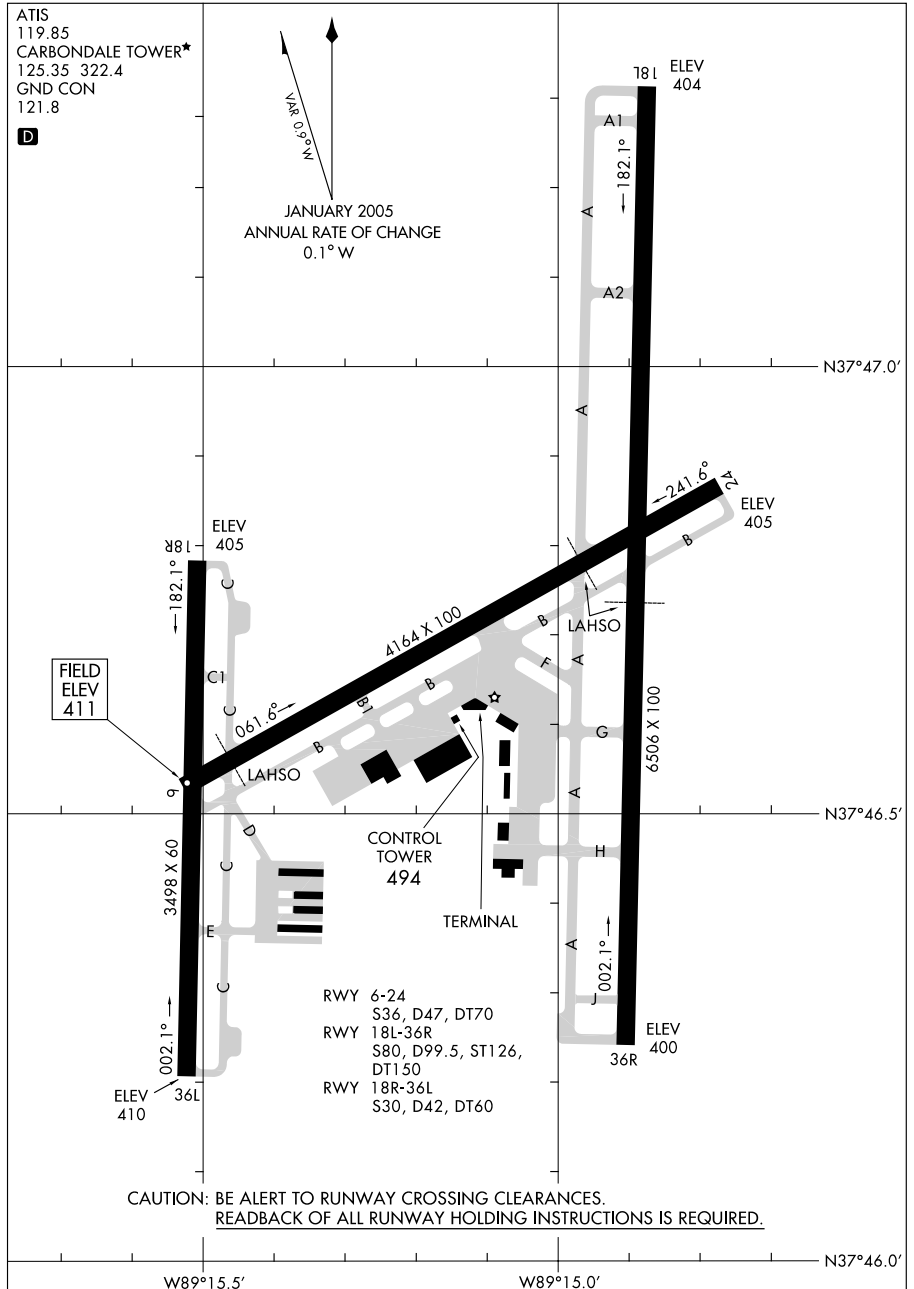
09295

CAHOKIA/ST. LOUIS, ILLINOIS  
CAHOKIA/ST. LOUIS DOWNTOWN (CPS)

09295

# AIRPORT DIAGRAM

CARBONDALE-MURPHYSBORO/ SOUTHERN ILLINOIS (MDH)  
AL-5091 (FAA) CARBONDALE-MURPHYSBORO, ILLINOIS



# AIRPORT DIAGRAM

09295

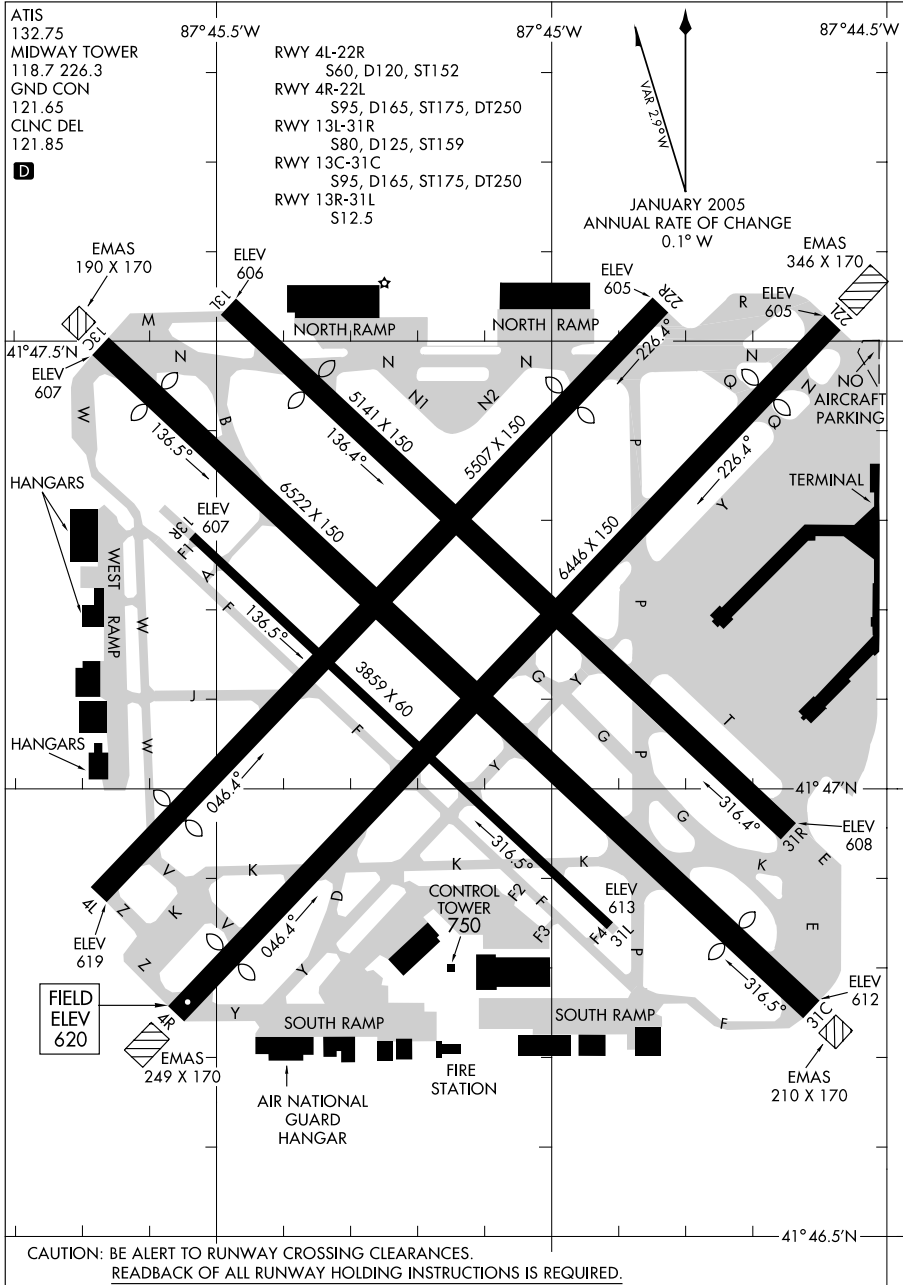
CARBONDALE-MURPHYSBORO, ILLINOIS  
CARBONDALE-MURPHYSBORO/ SOUTHERN ILLINOIS (MDH)



09071

## AIRPORT DIAGRAM

AL-81 (FAA)

CHICAGO MIDWAY INTL (MDW)  
CHICAGO, ILLINOIS

## AIRPORT DIAGRAM

09071

CHICAGO, ILLINOIS  
CHICAGO MIDWAY INTL (MDW)



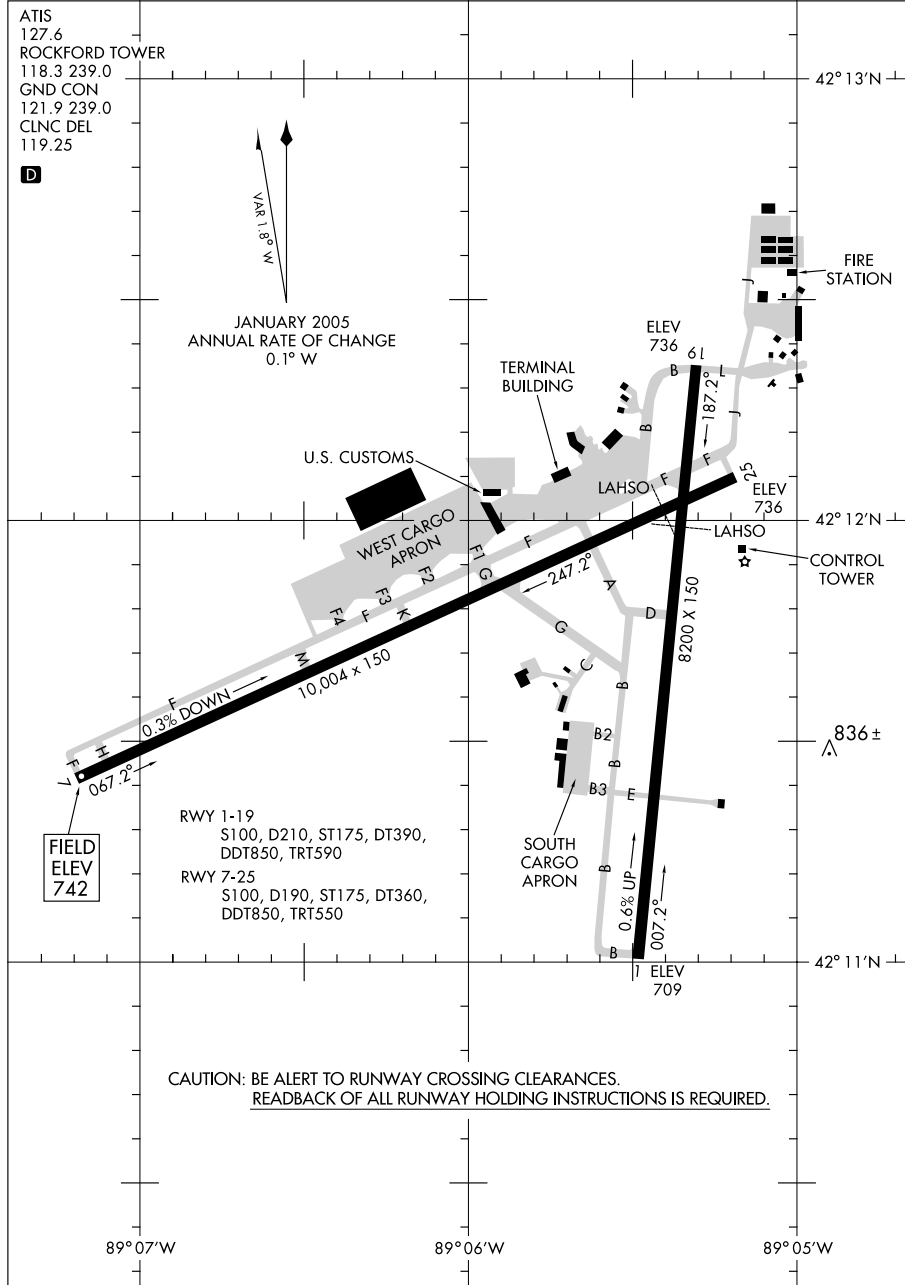


09015

# AIRPORT DIAGRAM

AL-954 (FAA)

CHICAGO/ROCKFORD INTL (RFD)  
CHICAGO/ROCKFORD, ILLINOIS



# AIRPORT DIAGRAM

09015

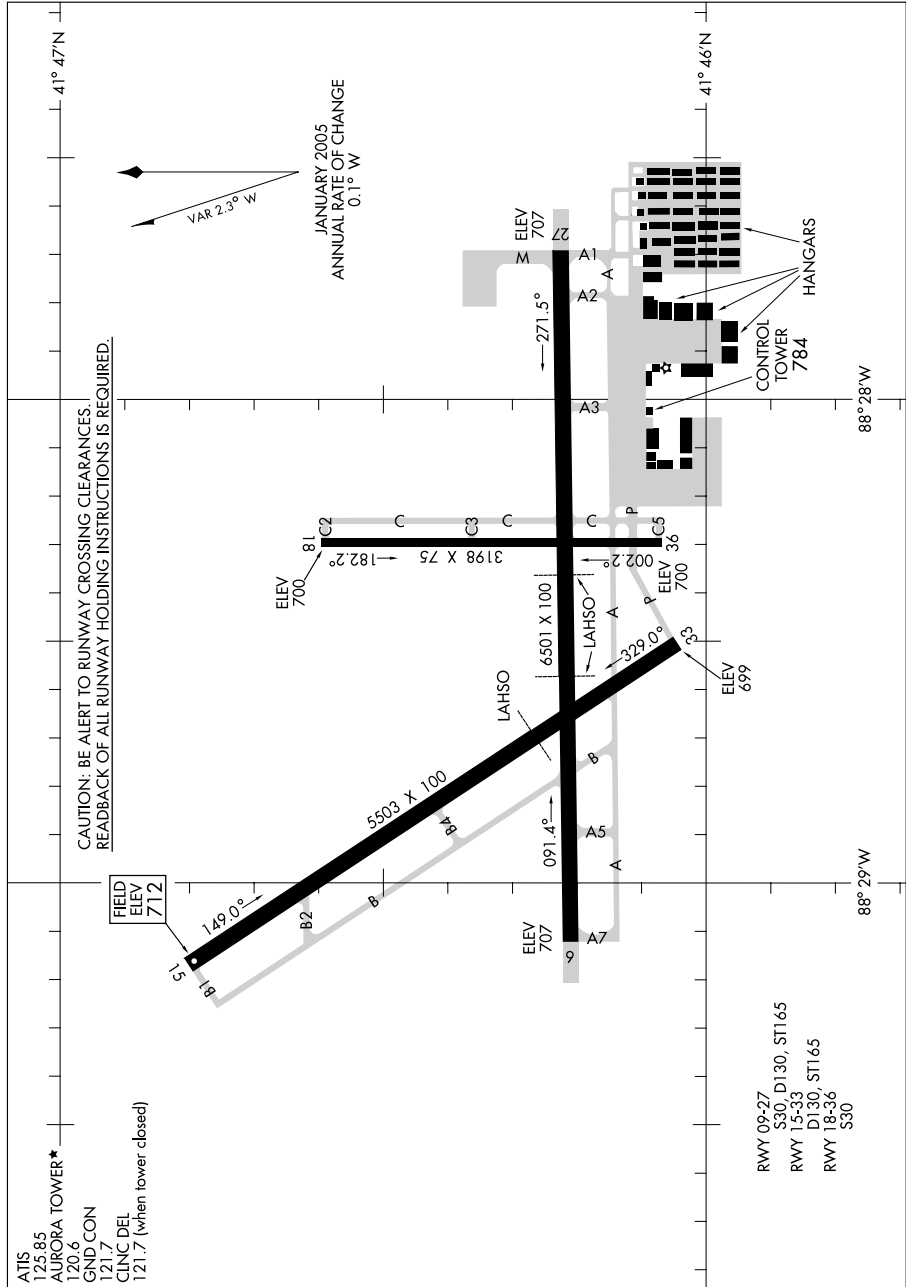
CHICAGO/ROCKFORD, ILLINOIS  
CHICAGO/ROCKFORD INTL (RFD)



09295

## AIRPORT DIAGRAM

AL-5103 (FAA)

CHICAGO/AURORA MUNI (ARR)  
CHICAGO/AURORA, ILLINOIS

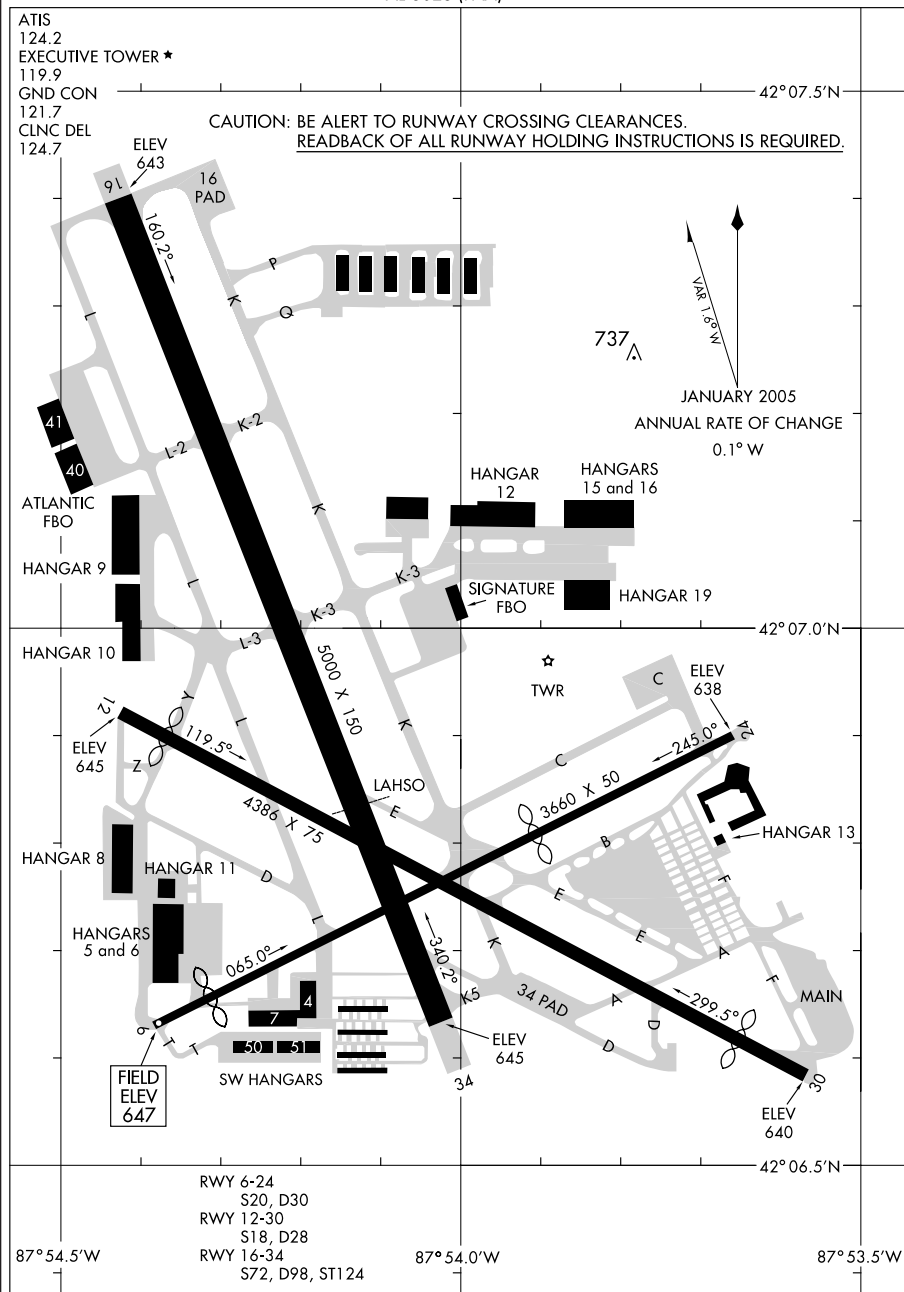
## AIRPORT DIAGRAM

09295

CHICAGO/AURORA, ILLINOIS  
CHICAGO/AURORA MUNI (ARR)

09295

## AIRPORT DIAGRAM

AL-5028 (FAA) CHICAGO/PROSPECT HEIGHTS/WHEELING, ILLINOIS  
CHICAGO EXECUTIVE (PWK)

## AIRPORT DIAGRAM

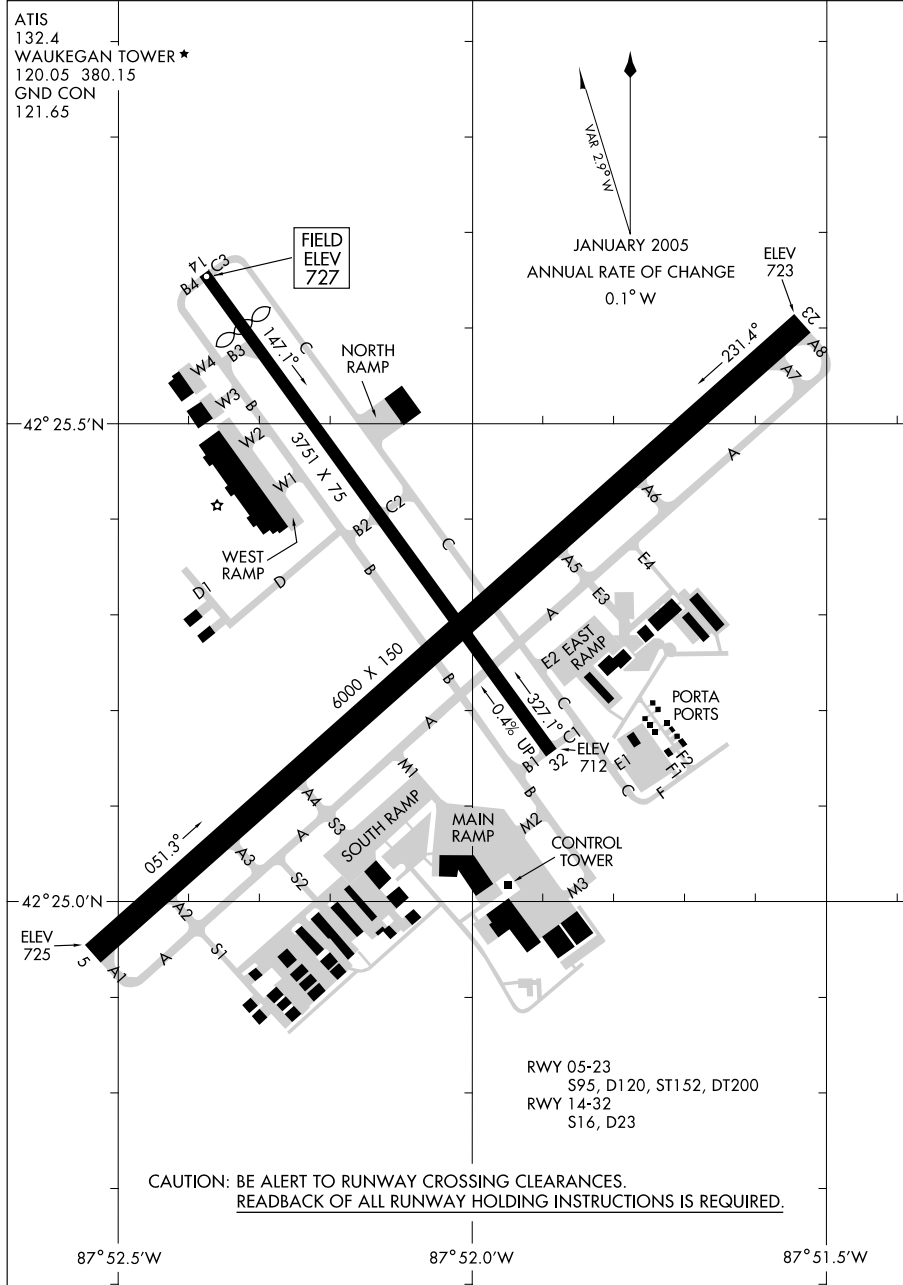
CHICAGO/PROSPECT HEIGHTS/WHEELING, ILLINOIS  
CHICAGO EXECUTIVE (PWK)

09295

09015

## AIRPORT DIAGRAM

AL-5324 (FAA)

CHICAGO/ WAUKEGAN RGNL (UGN)  
CHICAGO/WAUKEGAN, ILLINOIS

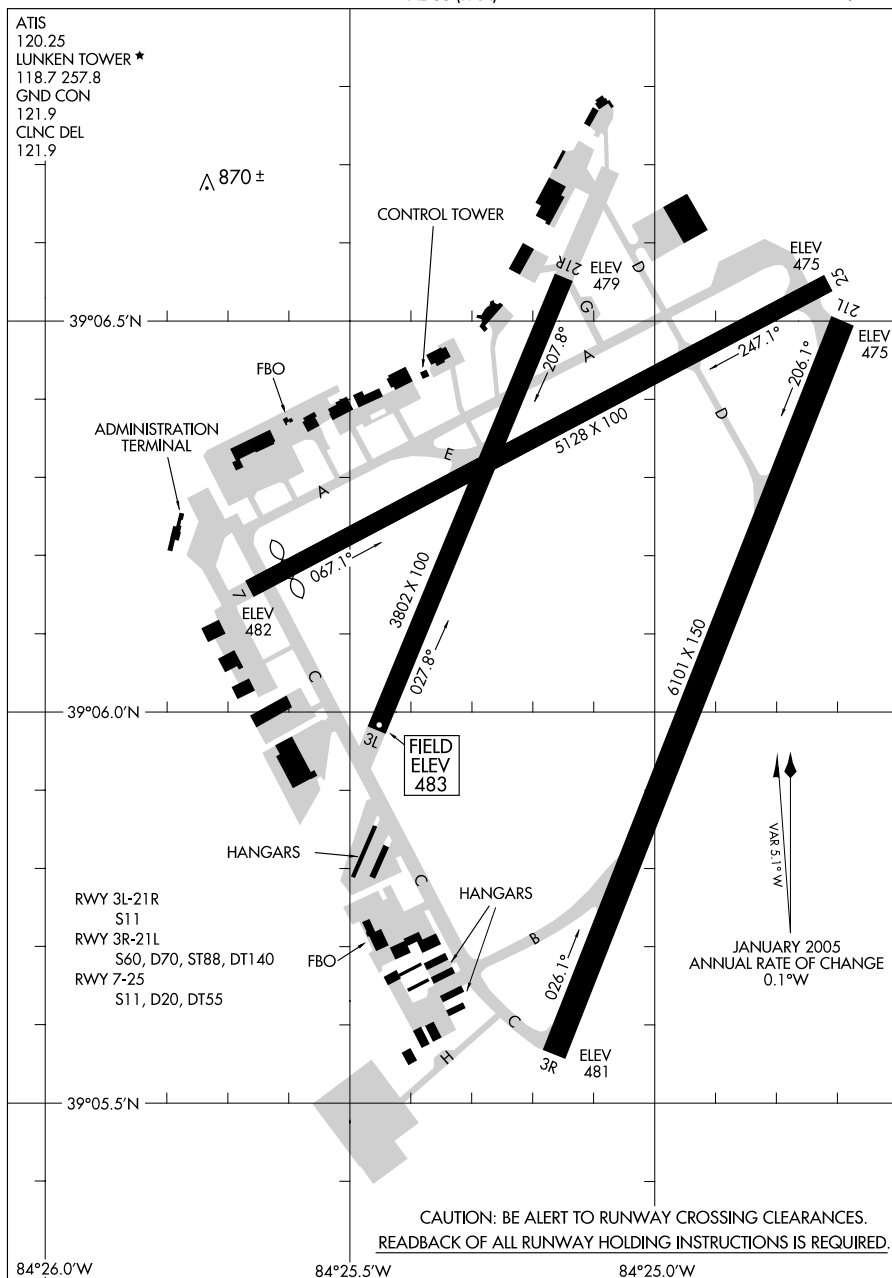
## AIRPORT DIAGRAM

09015

CHICAGO/WAUKEGAN, ILLINOIS  
CHICAGO/ WAUKEGAN RGNL (UGN)

09071

## AIRPORT DIAGRAM

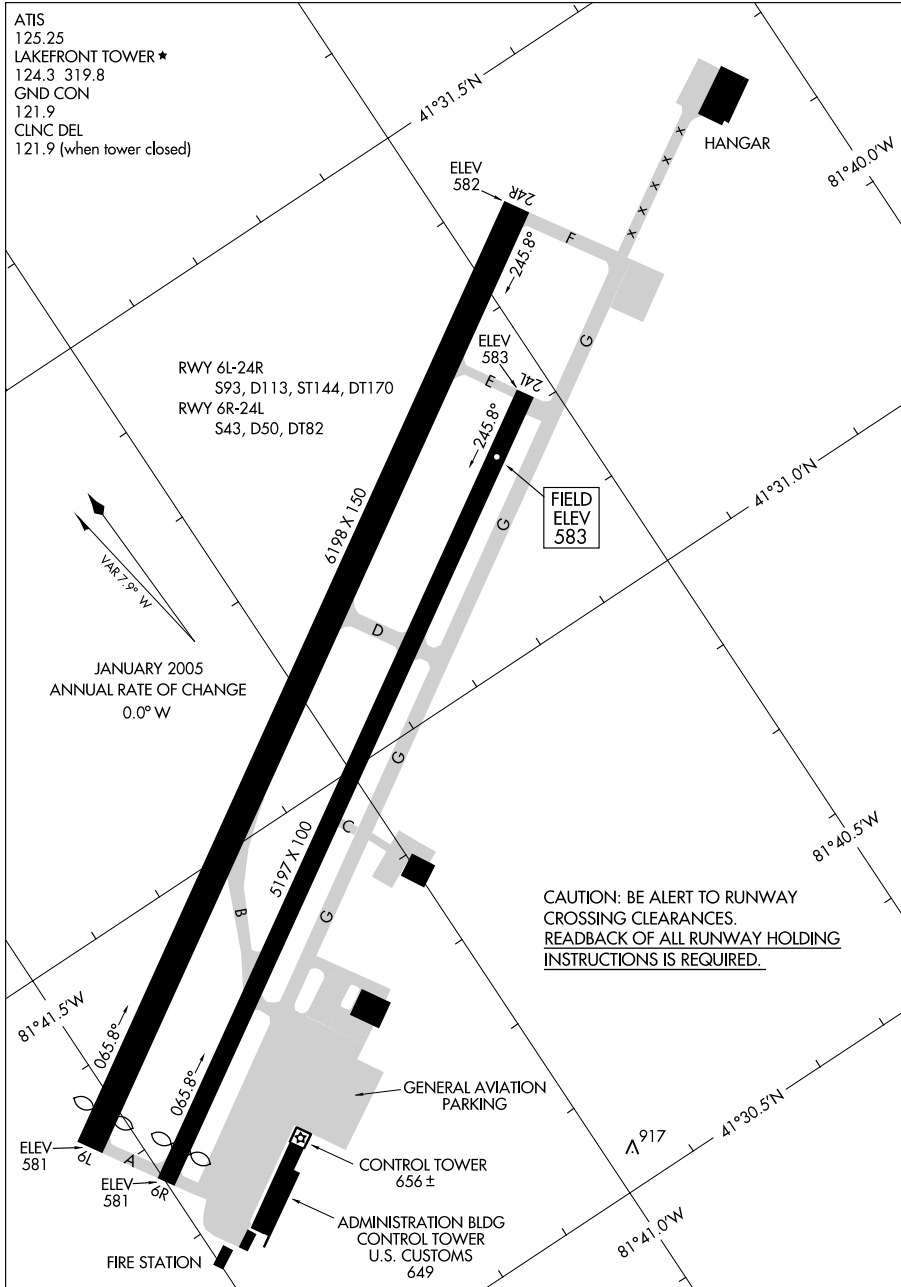
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LWK)  
AL-83 (FAA)  
CINCINNATI, OHIO

09015

## AIRPORT DIAGRAM

CLEVELAND/ BURKE LAKEFRONT (BKL)  
CLEVELAND, OHIO

AL-5370 (FAA)



## AIRPORT DIAGRAM

09015

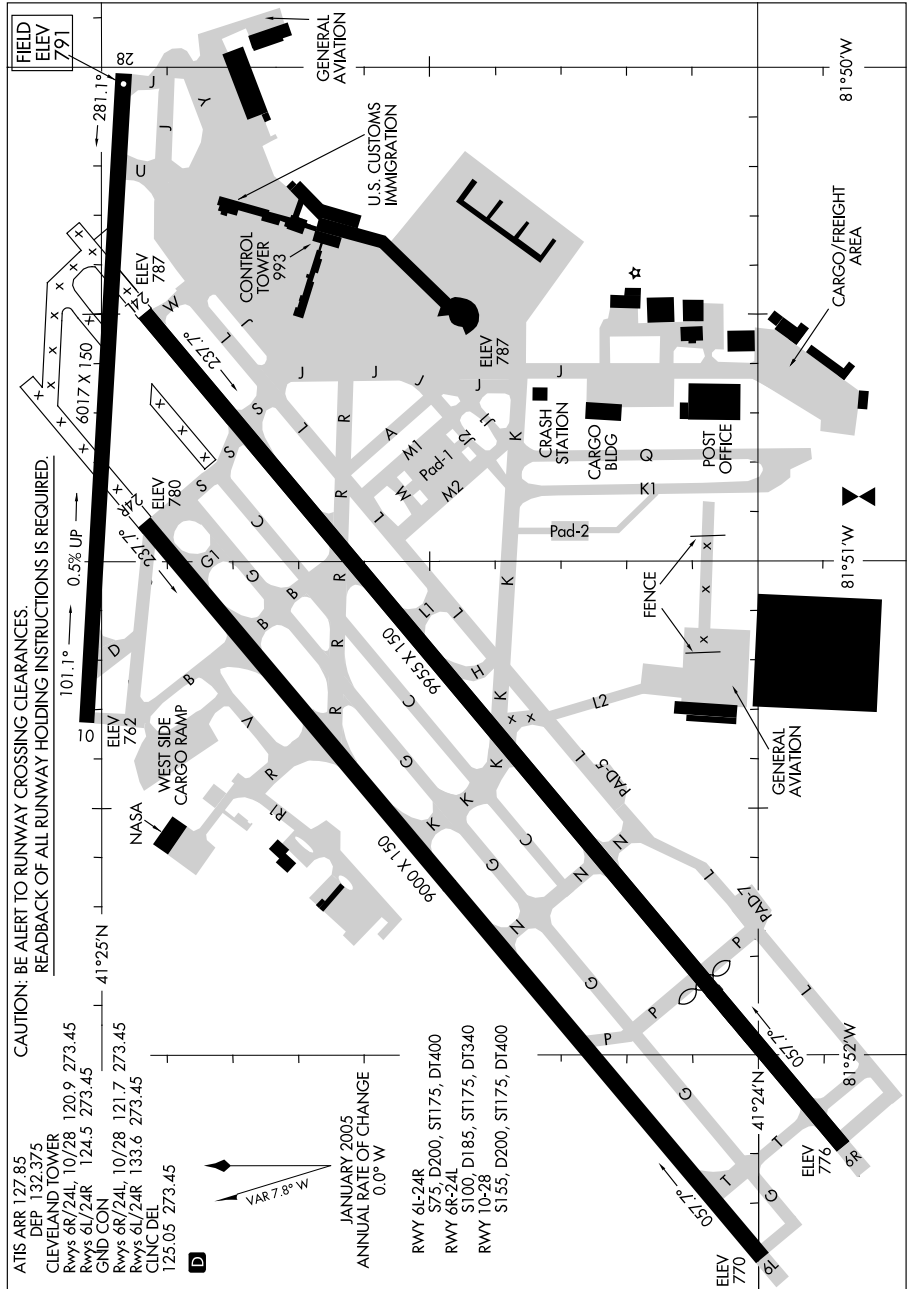
CLEVELAND, OHIO  
CLEVELAND/ BURKE LAKEFRONT (BKL)

09183

# AIRPORT DIAGRAM

AL-84 (FAA)

CLEVELAND-HOPKINS INTL (CLE)  
CLEVELAND, OHIO



## AIRPORT DIAGRAM

09183

CLEVELAND, OHIO  
CLEVELAND-HOPKINS INTL (CLE)

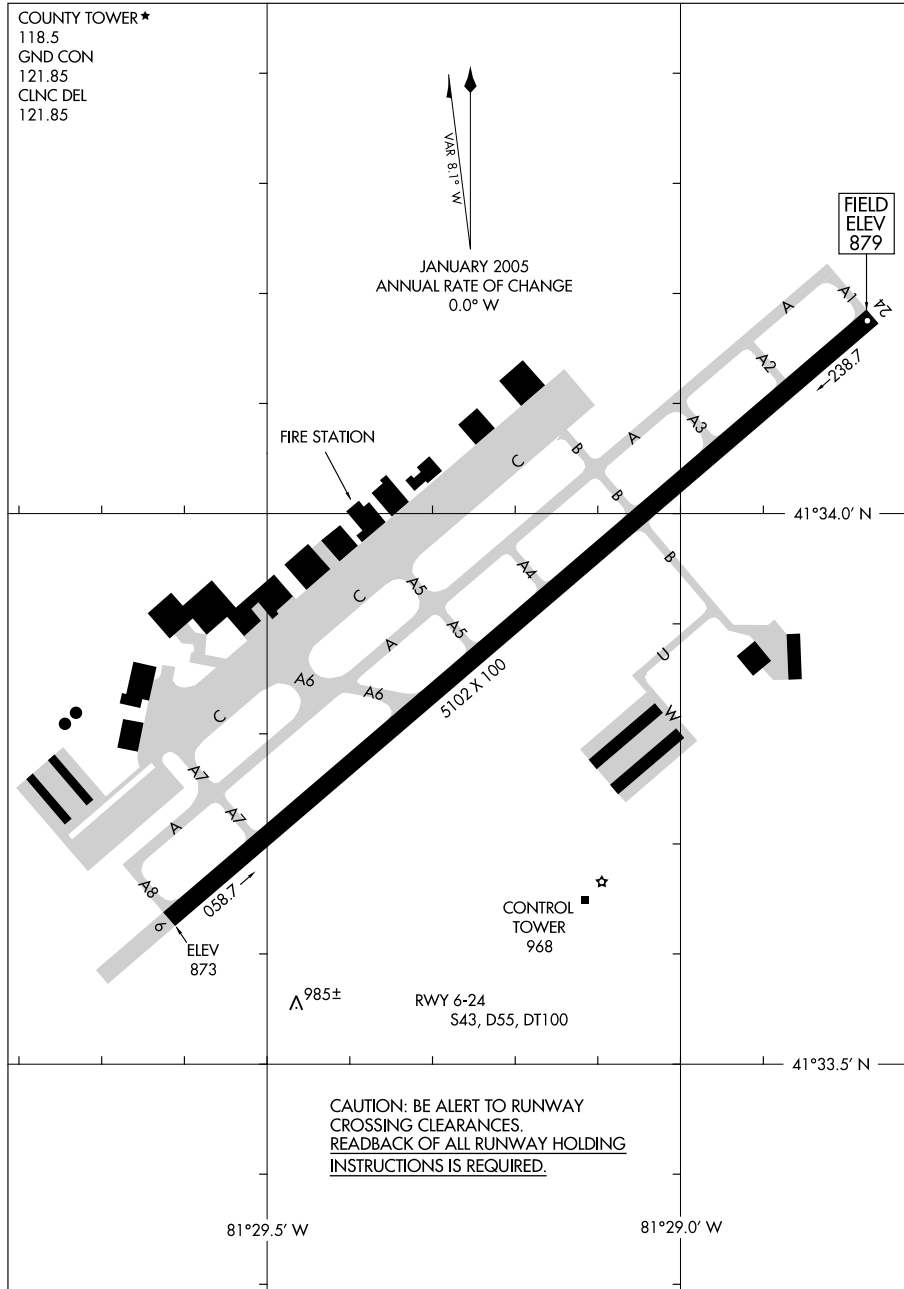


08269

# AIRPORT DIAGRAM

AL-5027 (FAA)

CLEVELAND / CUYAHOGA COUNTY (CGF)  
CLEVELAND, OHIO



# AIRPORT DIAGRAM

08269

CLEVELAND, OHIO  
CLEVELAND / CUYAHOGA COUNTY (CGF)

09295

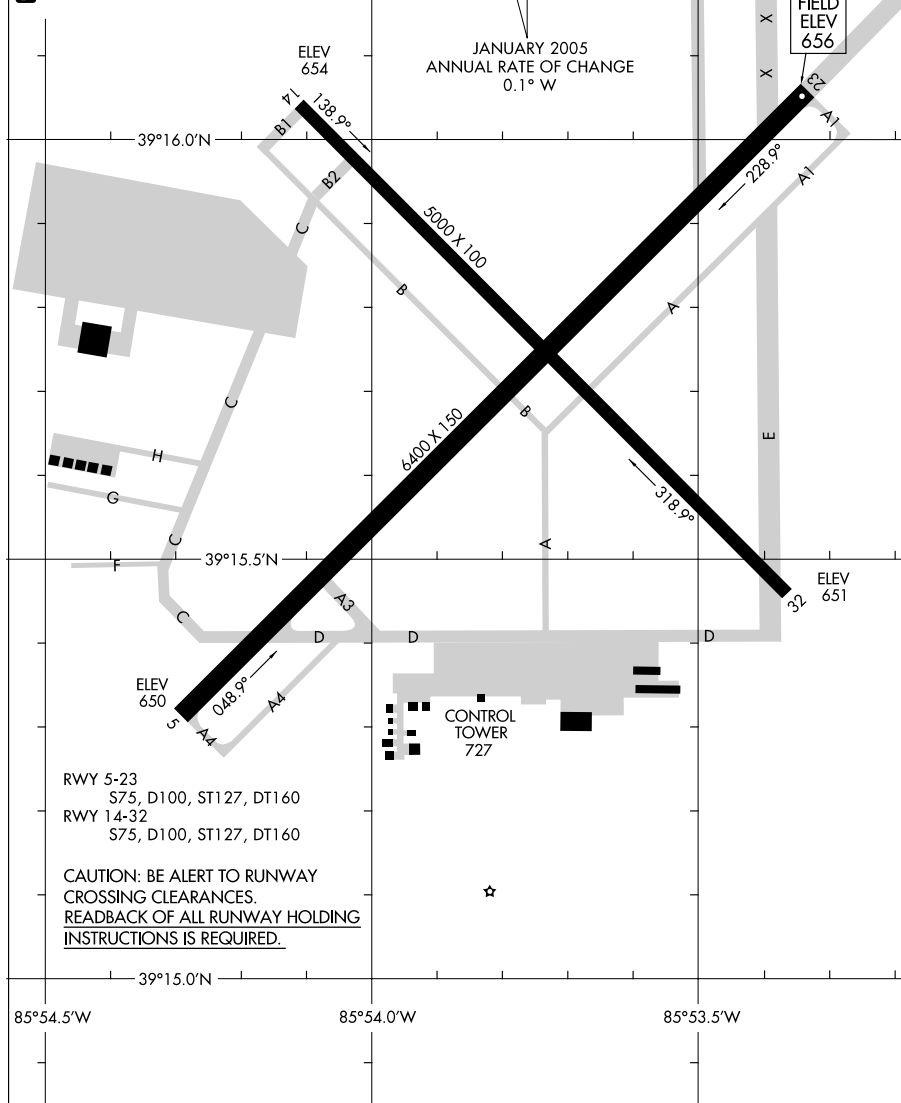
## AIRPORT DIAGRAM

AL-594 (FAA)

COLUMBUS MUNI (BAK)  
COLUMBUS, INDIANA

AWOS-3  
119.75  
COLUMBUS TOWER ★  
118.6  
GND CON  
121.6  
CLNC DEL  
134.85 (When twr closed)

D



## AIRPORT DIAGRAM

COLUMBUS, INDIANA  
COLUMBUS MUNI (BAK)

09295

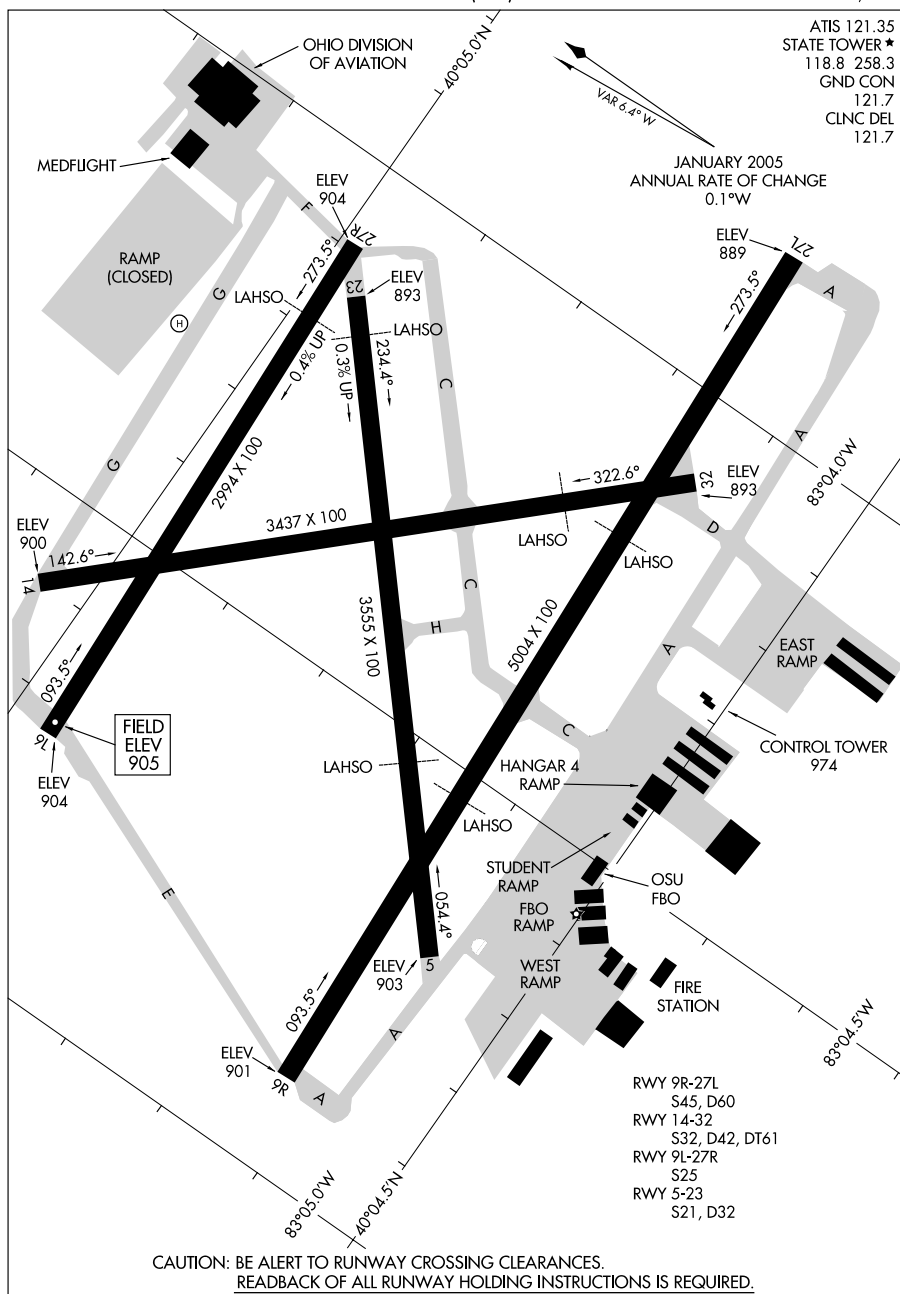


08269

## AIRPORT DIAGRAM

AL-5387 (FAA)

COLUMBUS/OHIO STATE UNIVERSITY (OSU)  
COLUMBUS, OHIO



## AIRPORT DIAGRAM

08269

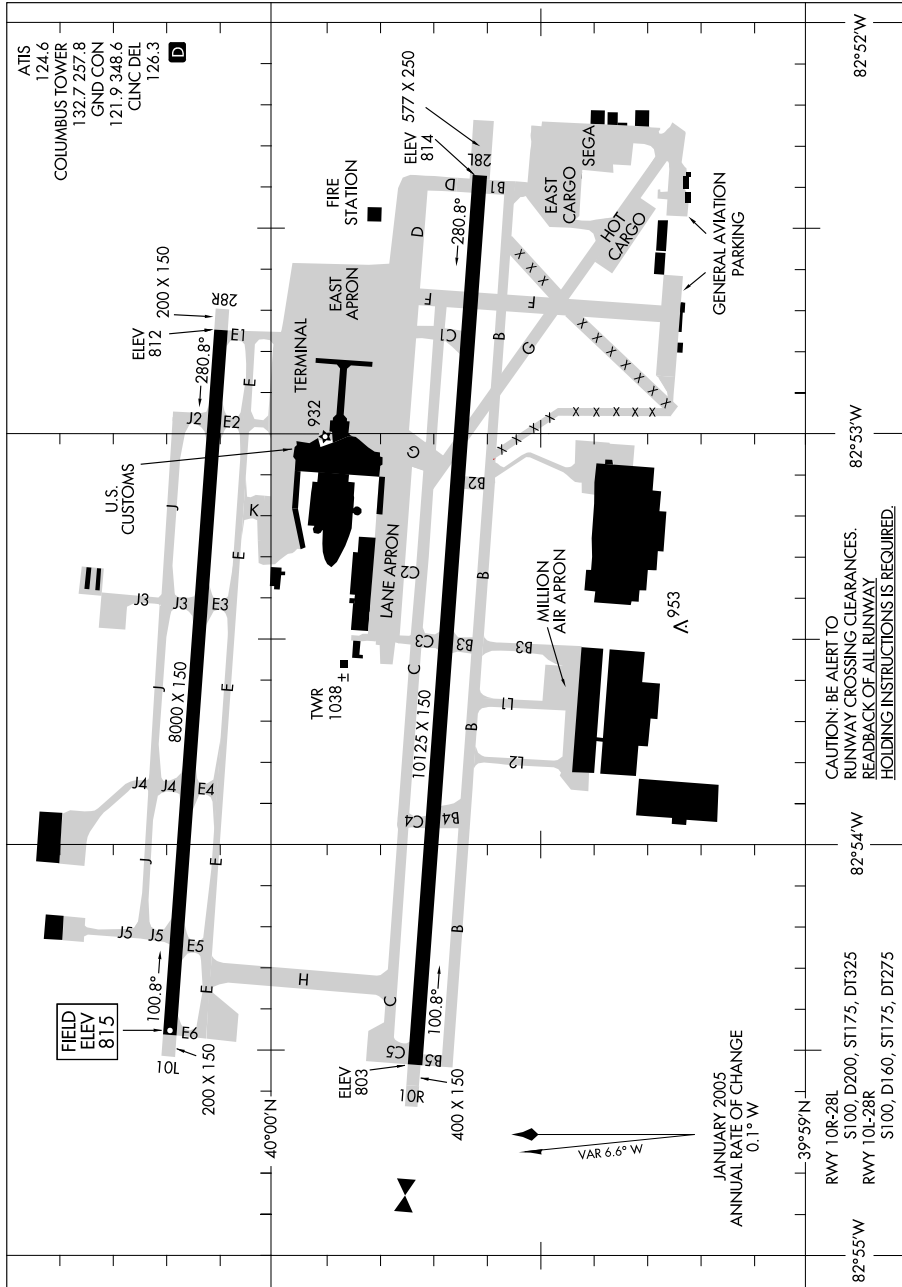
COLUMBUS, OHIO  
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

09295

## AIRPORT DIAGRAM

COLUMBUS/ PORT COLUMBUS INTL (CMH)  
COLUMBUS, OHIO

AL-94 (FAA)



## AIRPORT DIAGRAM

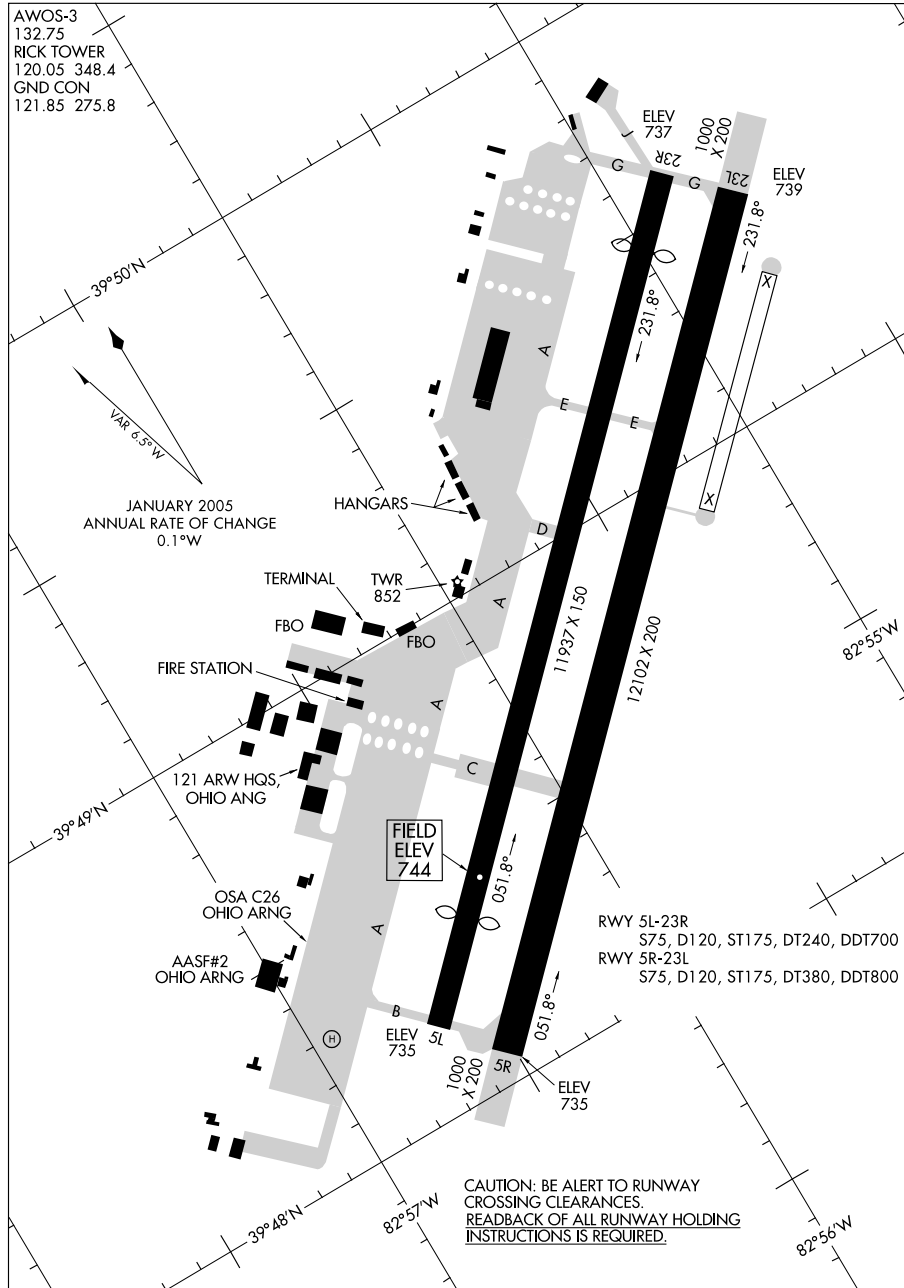
COLUMBUS, OHIO  
COLUMBUS/ PORT COLUMBUS INTL (CMH)

09295

09295

## AIRPORT DIAGRAM

AL-6846 (FAA)

COLUMBUS/RICKENBACKER INTL (LCK)  
COLUMBUS, OHIO

## AIRPORT DIAGRAM

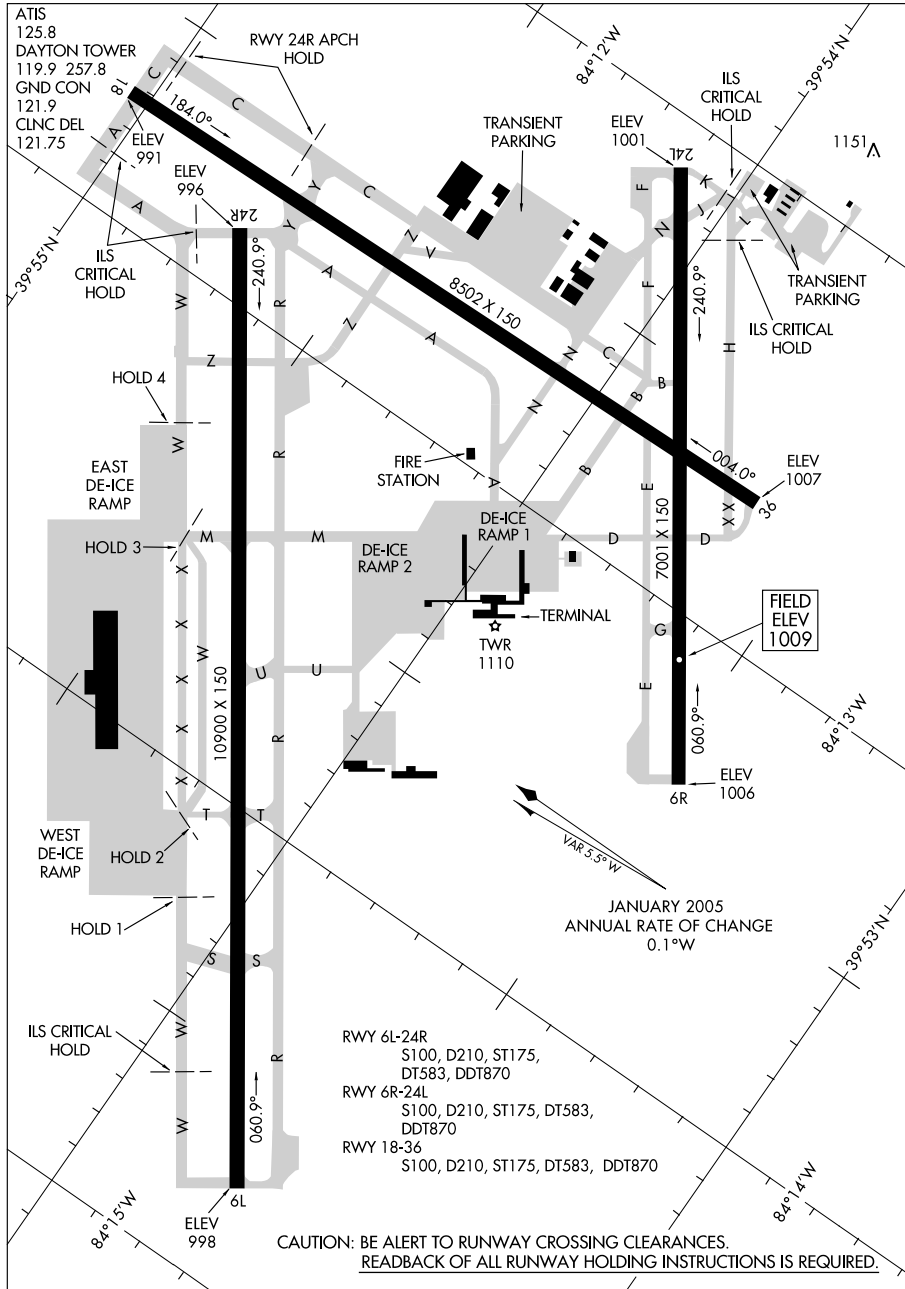
09295

COLUMBUS, OHIO  
COLUMBUS/RICKENBACKER INTL (LCK)

09183

# AIRPORT DIAGRAM

DAYTON / JAMES M. COX-DAYTON INTL (DAY)  
AL-107 (FAA) DAYTON, OHIO



# AIRPORT DIAGRAM

DAYTON, OHIO  
DAYTON / JAMES M. COX-DAYTON INTL (DAY)

09183

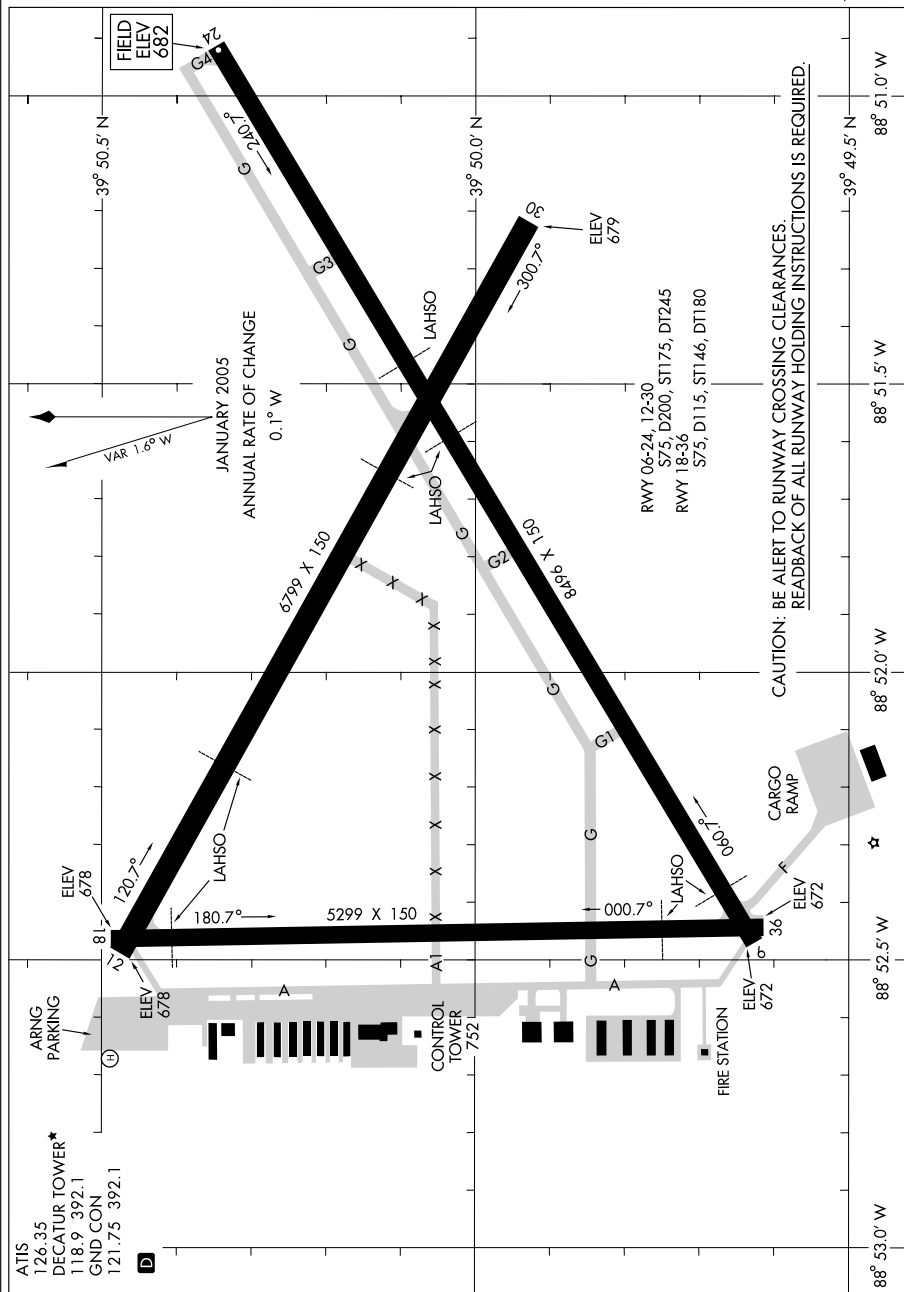
09295

## AIRPORT DIAGRAM

AL-710 (FAA)

## DECATUR (DEC)

DECATUR, ILLINOIS



## AIRPORT DIAGRAM

09295

DECATUR, ILLINOIS  
DECATUR (DEC)

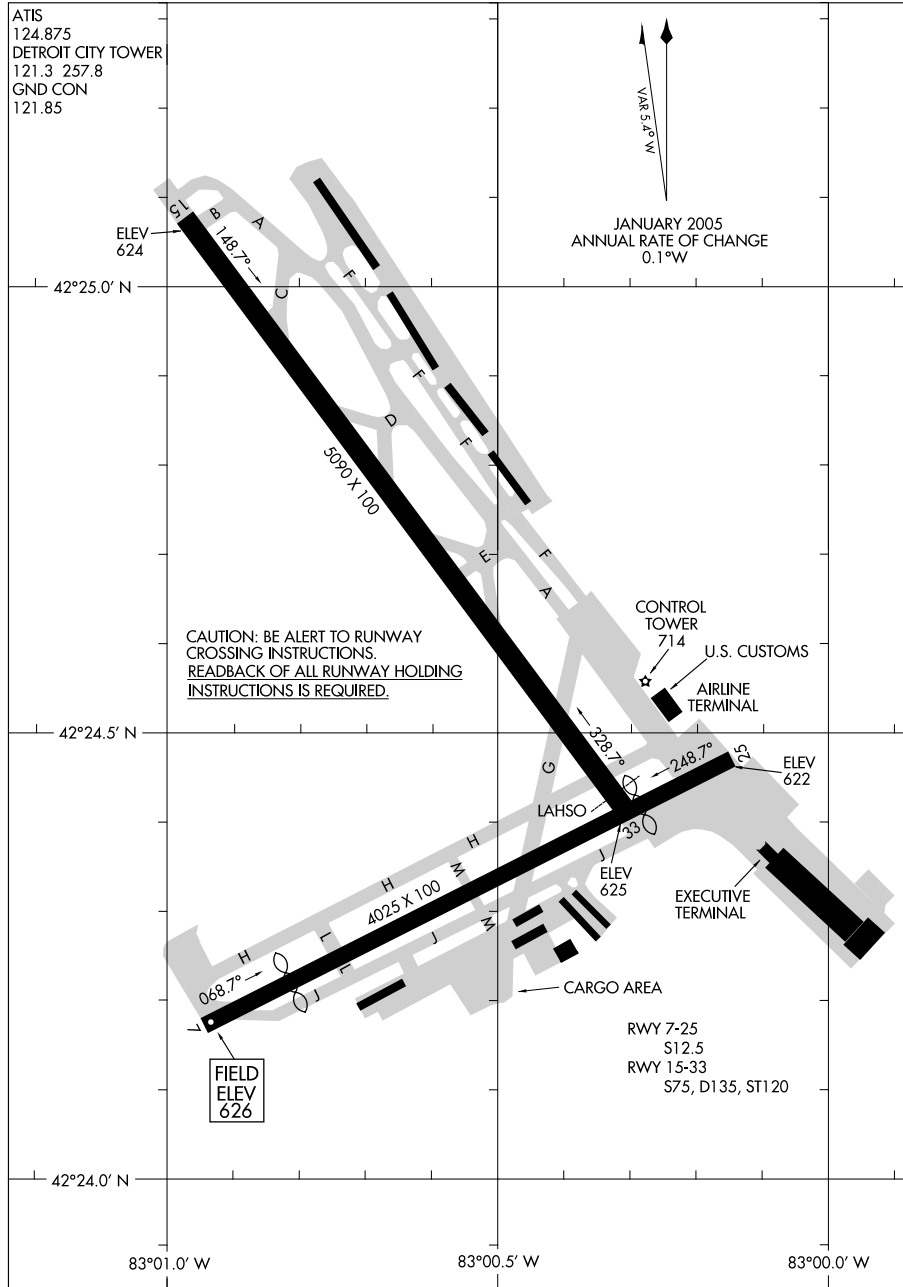


09015

## AIRPORT DIAGRAM

DETROIT/ COLEMAN A. YOUNG MUNI (DET)  
DETROIT, MICHIGAN

AL-118 (FAA)



## AIRPORT DIAGRAM

09015

DETROIT, MICHIGAN  
DETROIT/ COLEMAN A. YOUNG MUNI (DET)

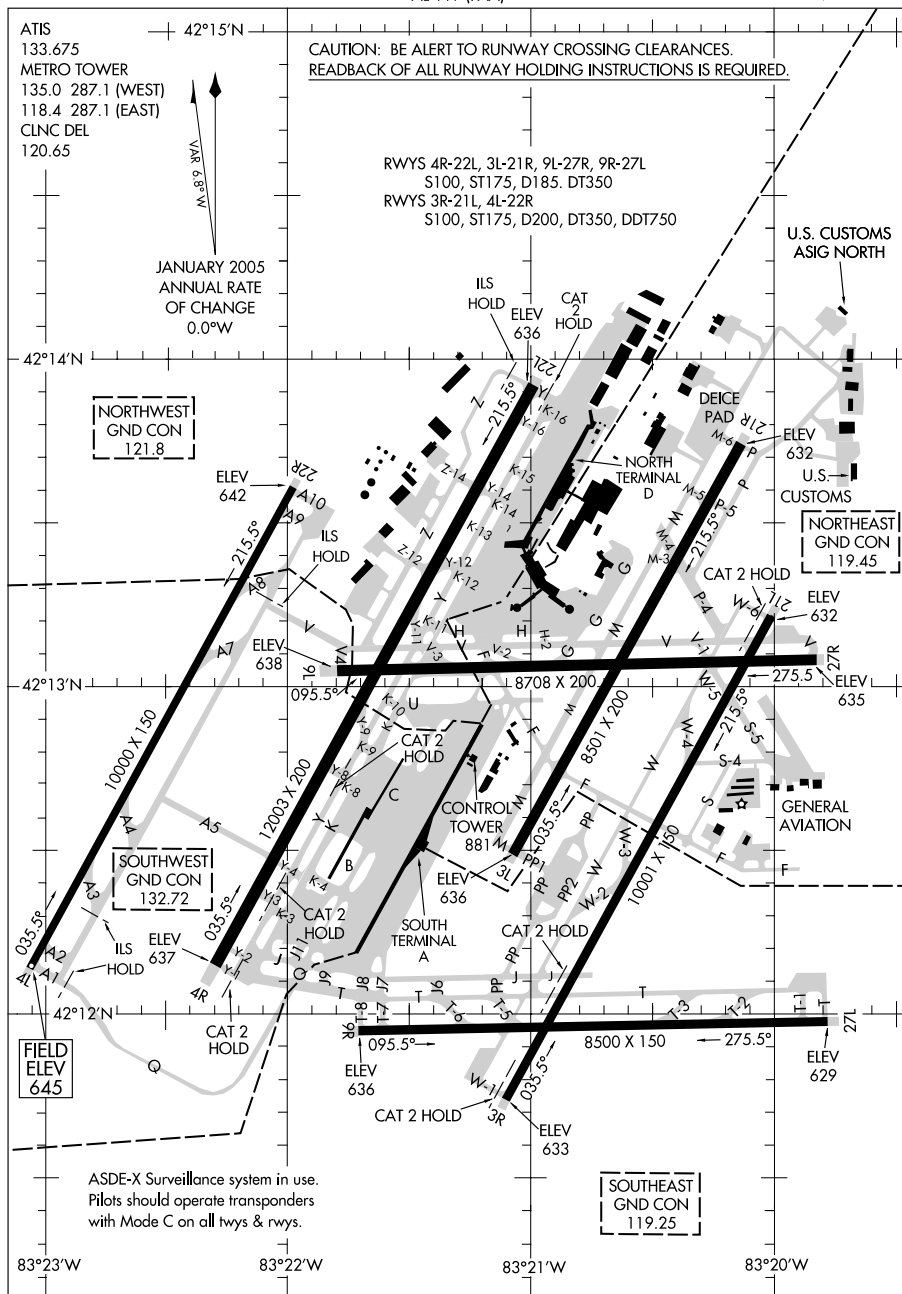
09295

## AIRPORT DIAGRAM

DETROIT METROPOLITAN WAYNE COUNTY (DTW)

AL-119 (FAA)

DETROIT, MICHIGAN



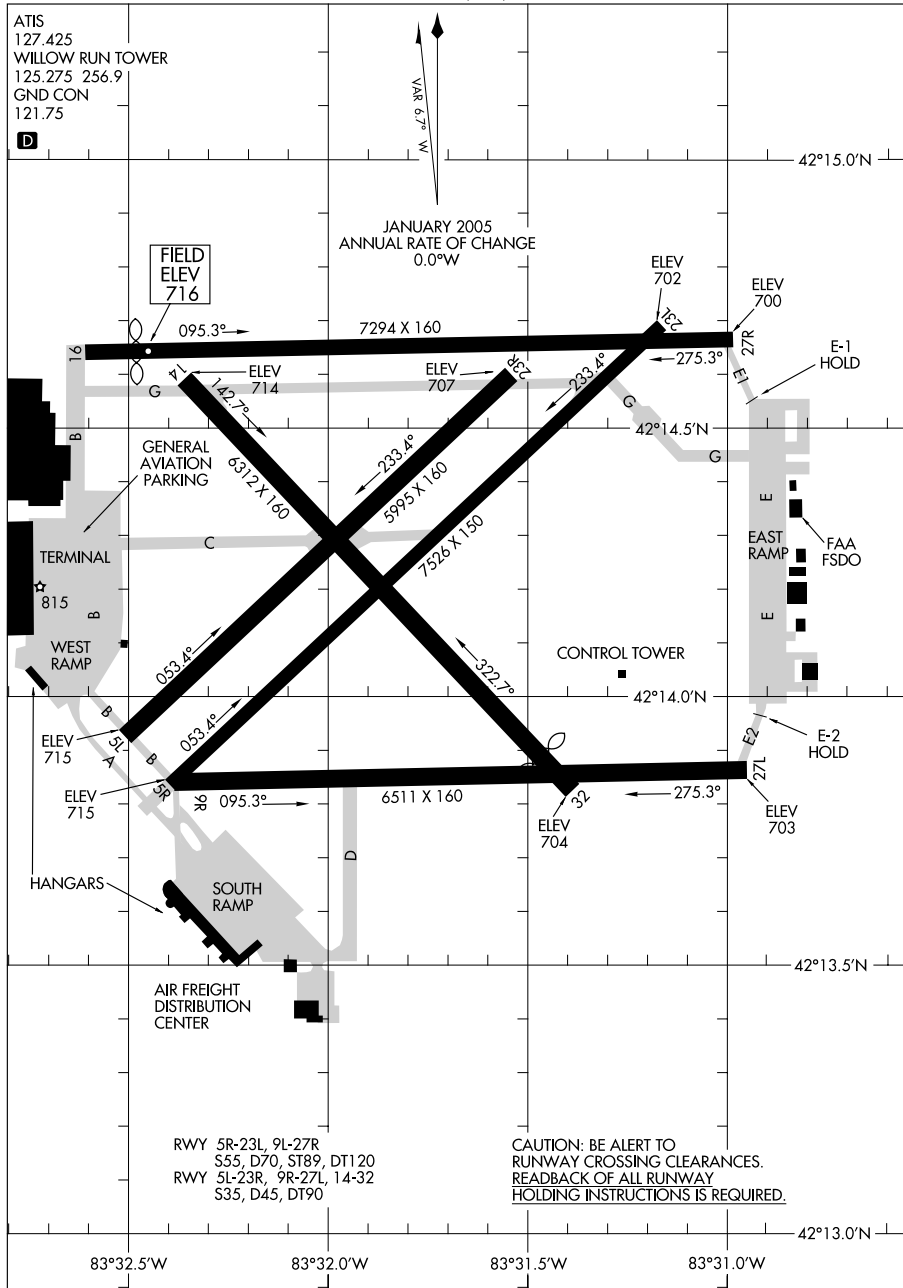
## AIRPORT DIAGRAM

09295

DETROIT, MICHIGAN  
DETROIT METROPOLITAN WAYNE COUNTY (DTW)

09295

## AIRPORT DIAGRAM

DETROIT/WILLOW RUN (YIP)  
DETROIT, MICHIGAN

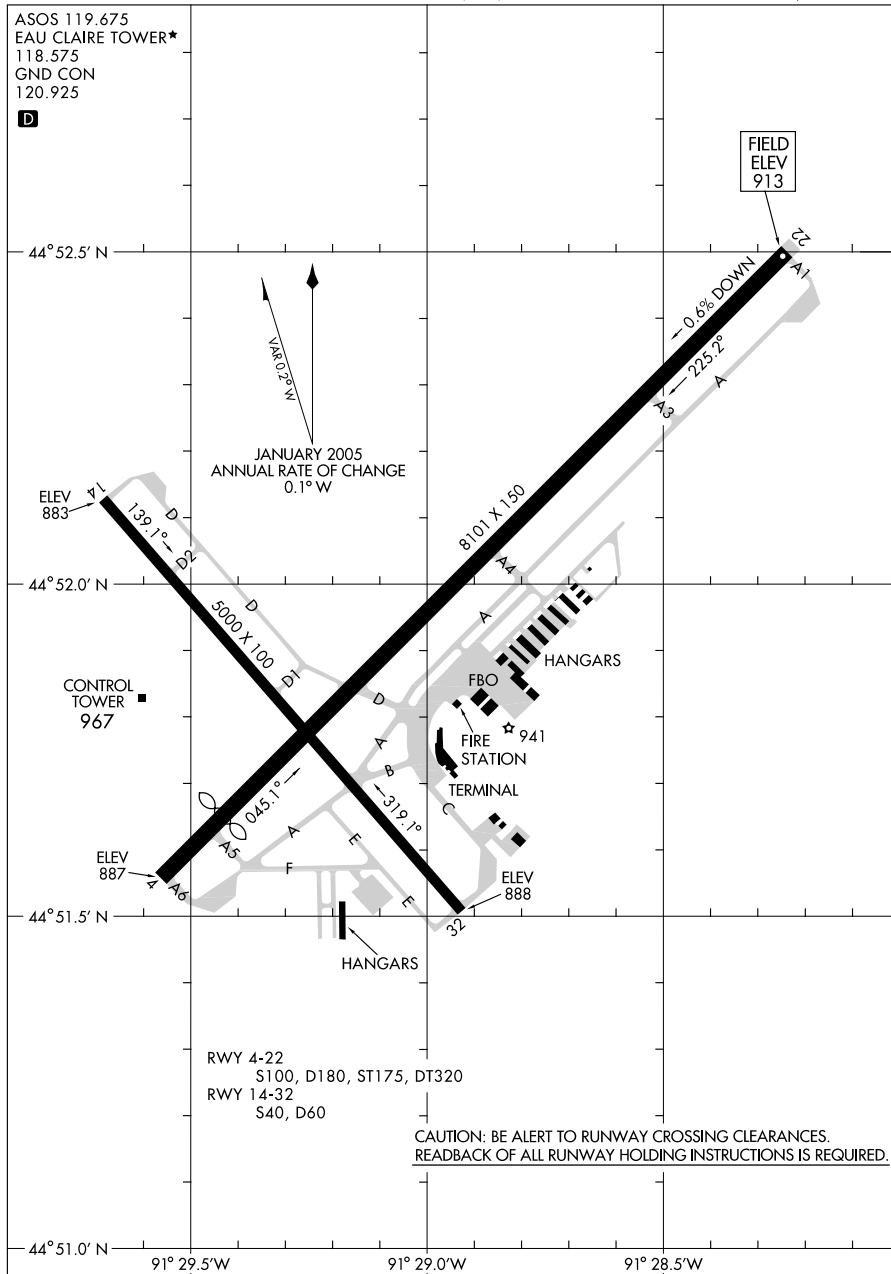
## AIRPORT DIAGRAM

09295

DETROIT, MICHIGAN  
DETROIT/WILLOW RUN (YIP)

09071

## AIRPORT DIAGRAM

EAU CLAIRE/CHIPPEWA VALLEY RGNL (EAU)  
AL-937 (FAA) EAU CLAIRE, WISCONSIN

## AIRPORT DIAGRAM

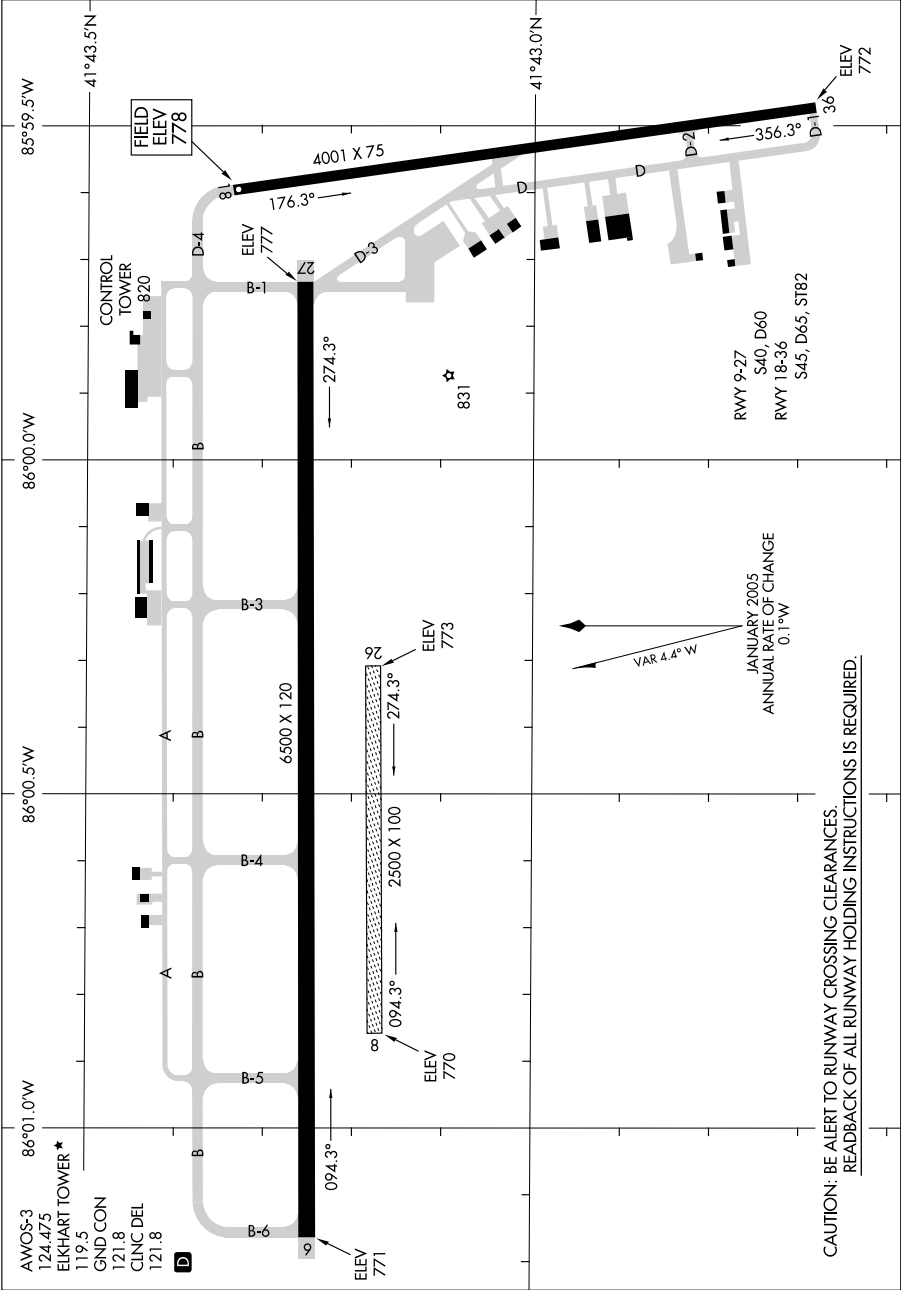
09071

EAU CLAIRE, WISCONSIN  
EAU CLAIRE/CHIPPEWA VALLEY RGNL (EAU)

09295  
AIRPORT DIAGRAM

AL-5287 (FAA)

ELKHART MUNI (EKM)  
ELKHART, INDIANA



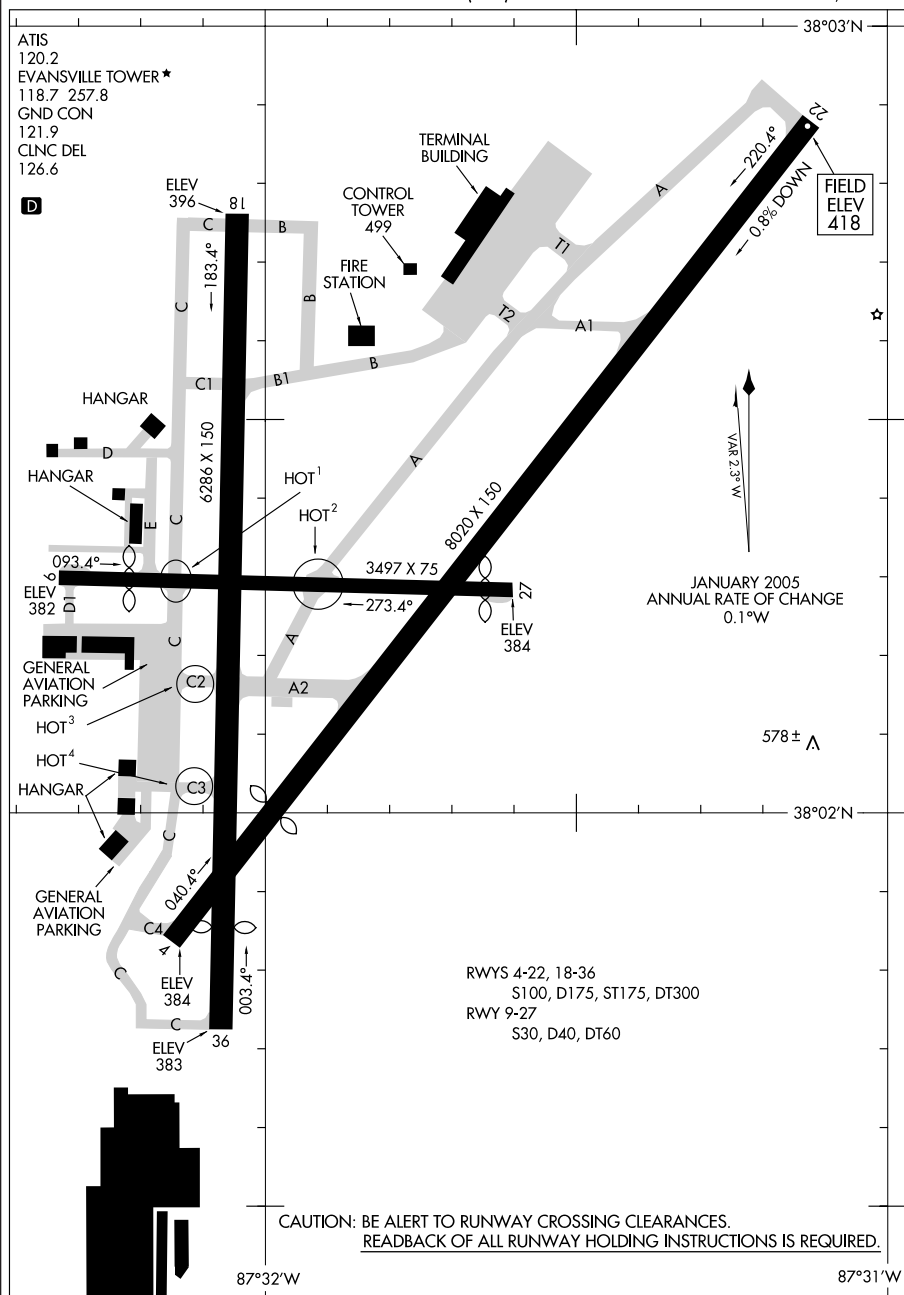
09295  
AIRPORT DIAGRAM

ELKHART, INDIANA  
ELKHART MUNI (EKM)

09295

## AIRPORT DIAGRAM

AL-513 (FAA)

EVANSVILLE RGNL (E.V.V.)  
EVANSVILLE, INDIANA

## AIRPORT DIAGRAM

09295

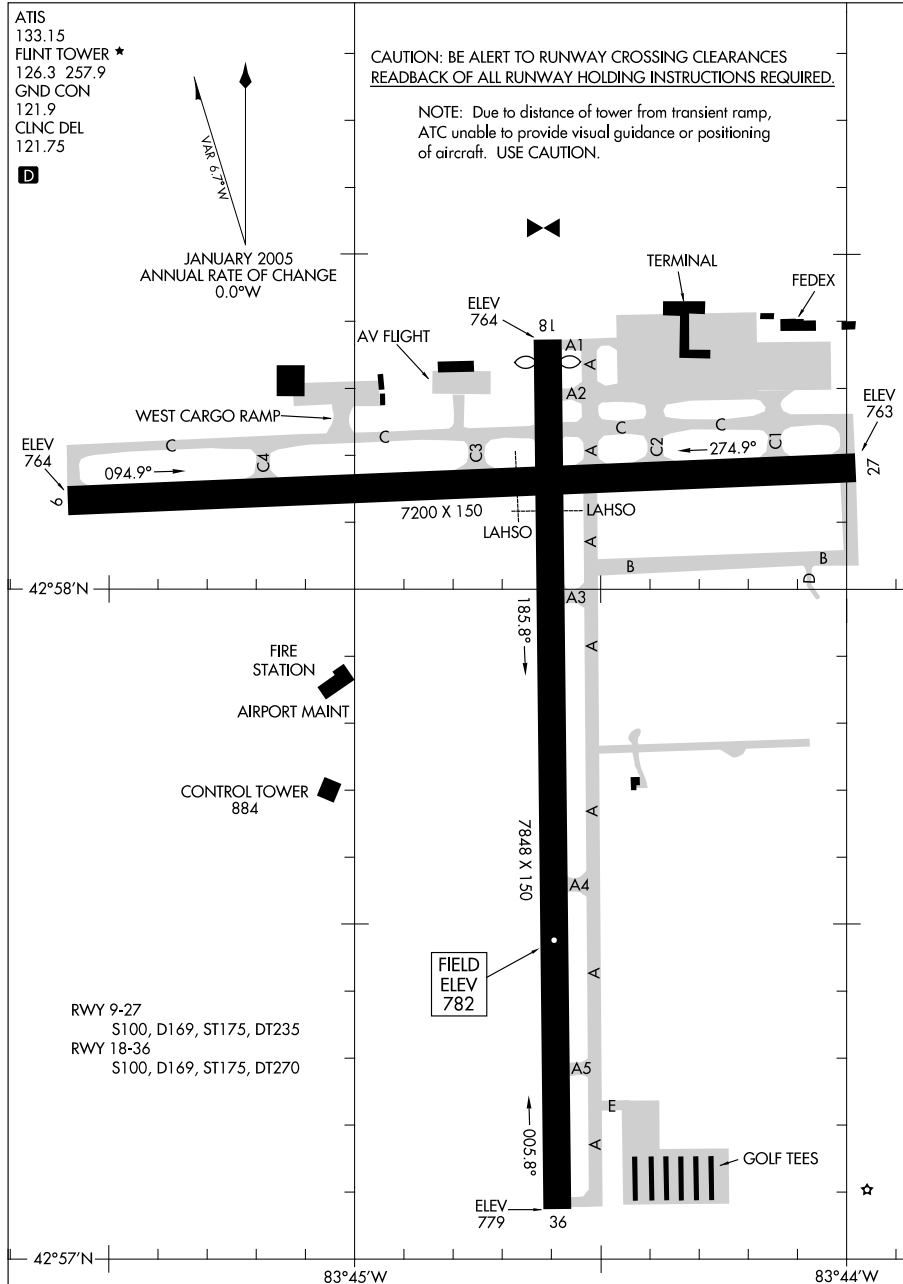
EVANSVILLE, INDIANA  
EVANSVILLE RGNL (E.V.V.)

09295

## AIRPORT DIAGRAM

FLINT / BISHOP INTL (FNT)  
FLINT, MICHIGAN

AL-618 (FAA)



## AIRPORT DIAGRAM

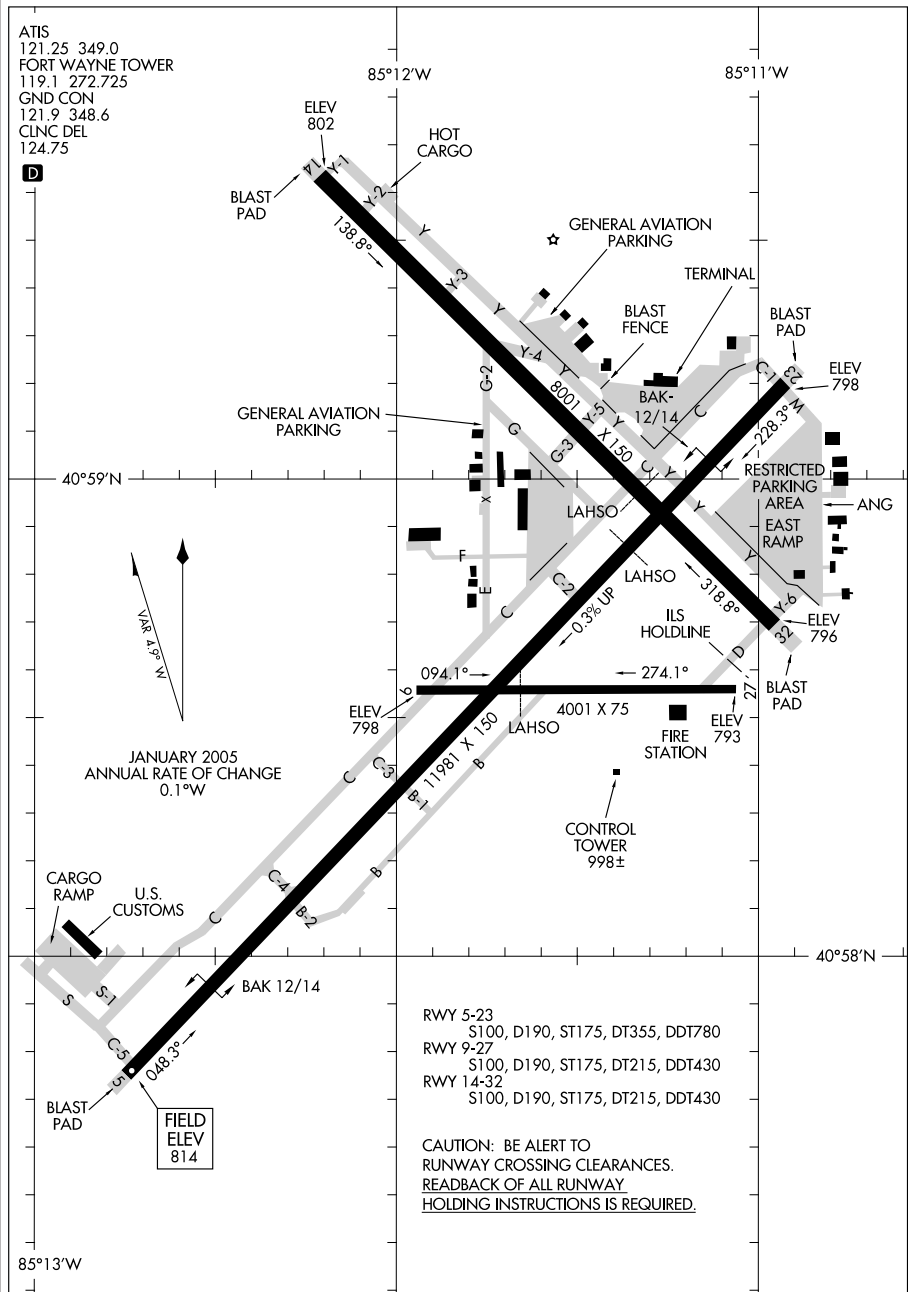
09295

FLINT, MICHIGAN  
FLINT / BISHOP INTL (FNT)

09295

## AIRPORT DIAGRAM

AL-156 (FAA)

FORT WAYNE INTL (FWA)  
FORT WAYNE, INDIANA

## AIRPORT DIAGRAM

09295

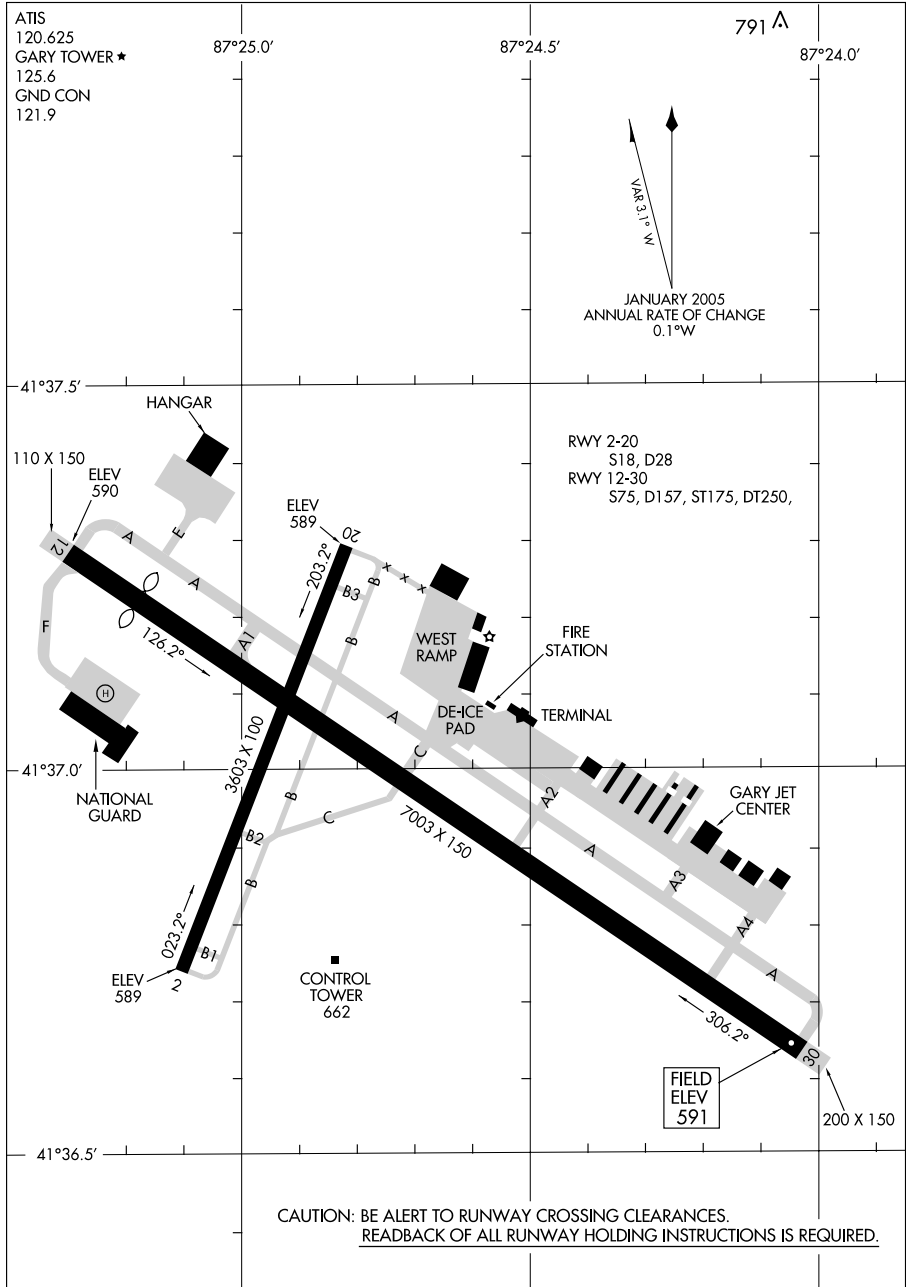
FORT WAYNE, INDIANA  
FORT WAYNE INTL (FWA)



09015

## AIRPORT DIAGRAM

AL-748 (FAA)

GARY/CHICAGO INTL (GYY)  
GARY, INDIANA

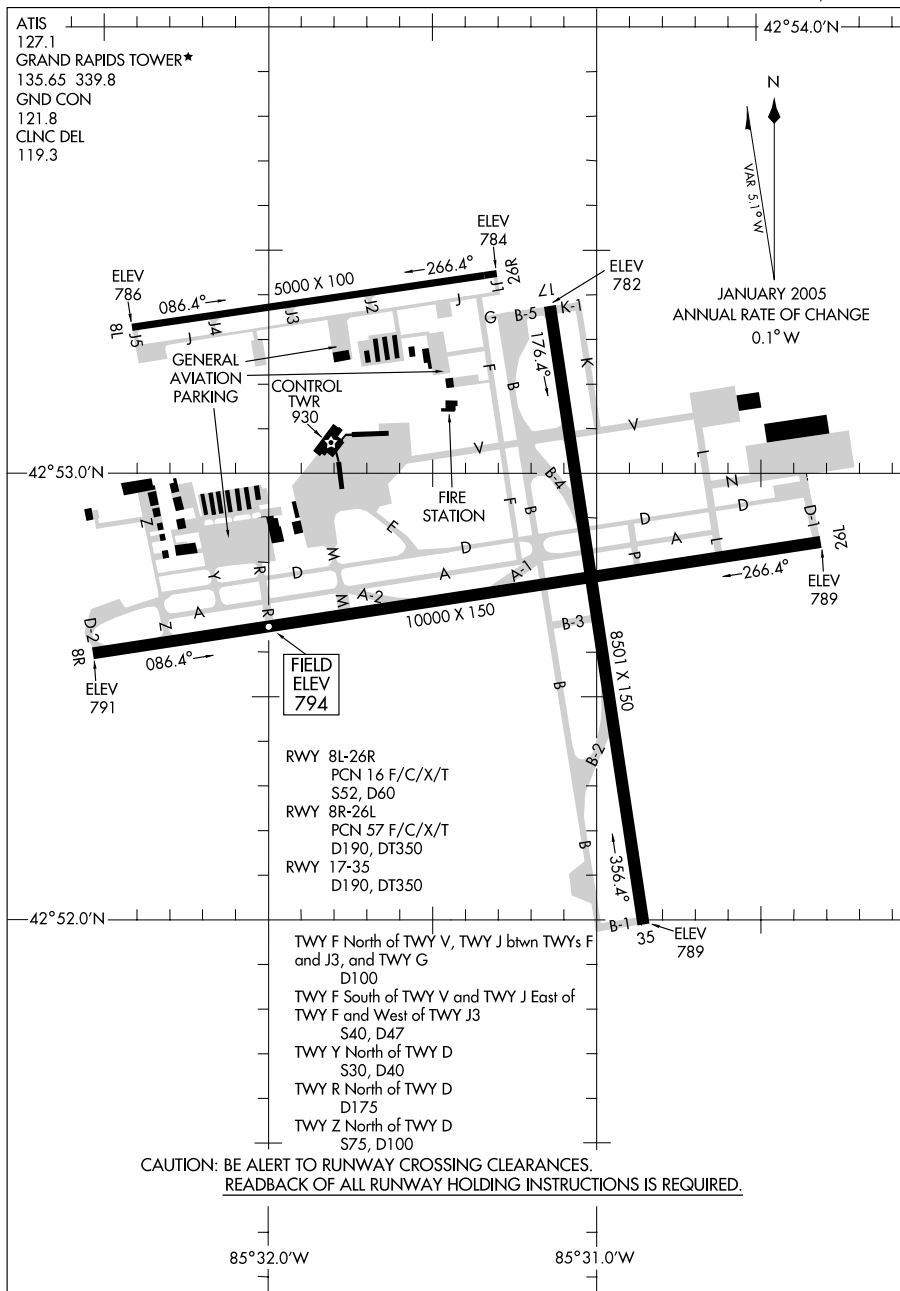
## AIRPORT DIAGRAM

09015

GARY, INDIANA  
GARY/CHICAGO INTL (GYY)

09183

## AIRPORT DIAGRAM

GRAND RAPIDS / GERALD R. FORD INTL (GRR)  
AL-5184 (FAA) GRAND RAPIDS, MICHIGAN

## AIRPORT DIAGRAM

09183

GRAND RAPIDS, MICHIGAN  
GRAND RAPIDS / GERALD R. FORD INTL (GRR)

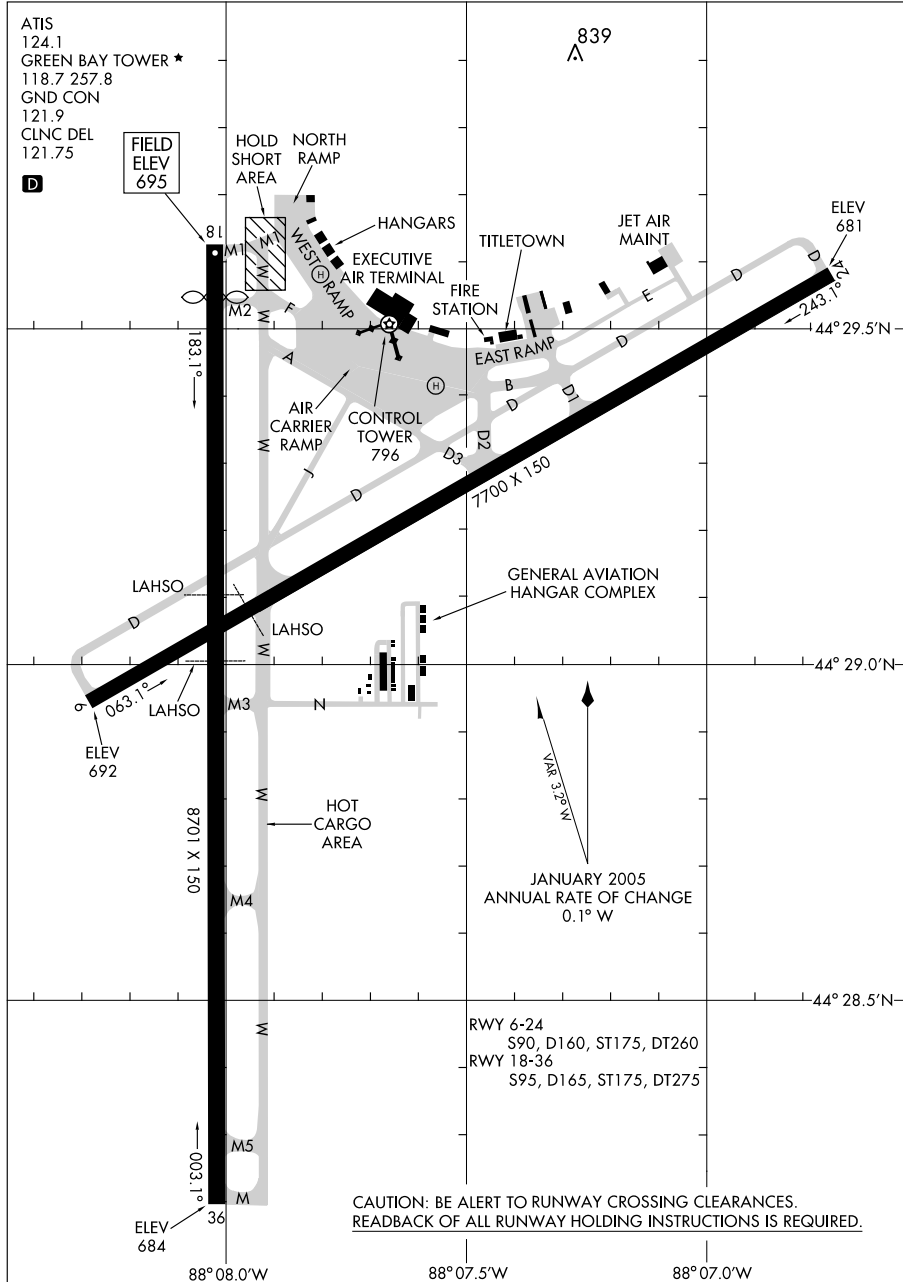
09183

# AIRPORT DIAGRAM

AL-873 (FAA)

GREEN BAY/AUSTIN STRAUBEL INTL (GRB)

GREEN BAY, WISCONSIN



# AIRPORT DIAGRAM

09183

GREEN BAY, WISCONSIN  
GREEN BAY/AUSTIN STRAUBEL INTL (GRB)

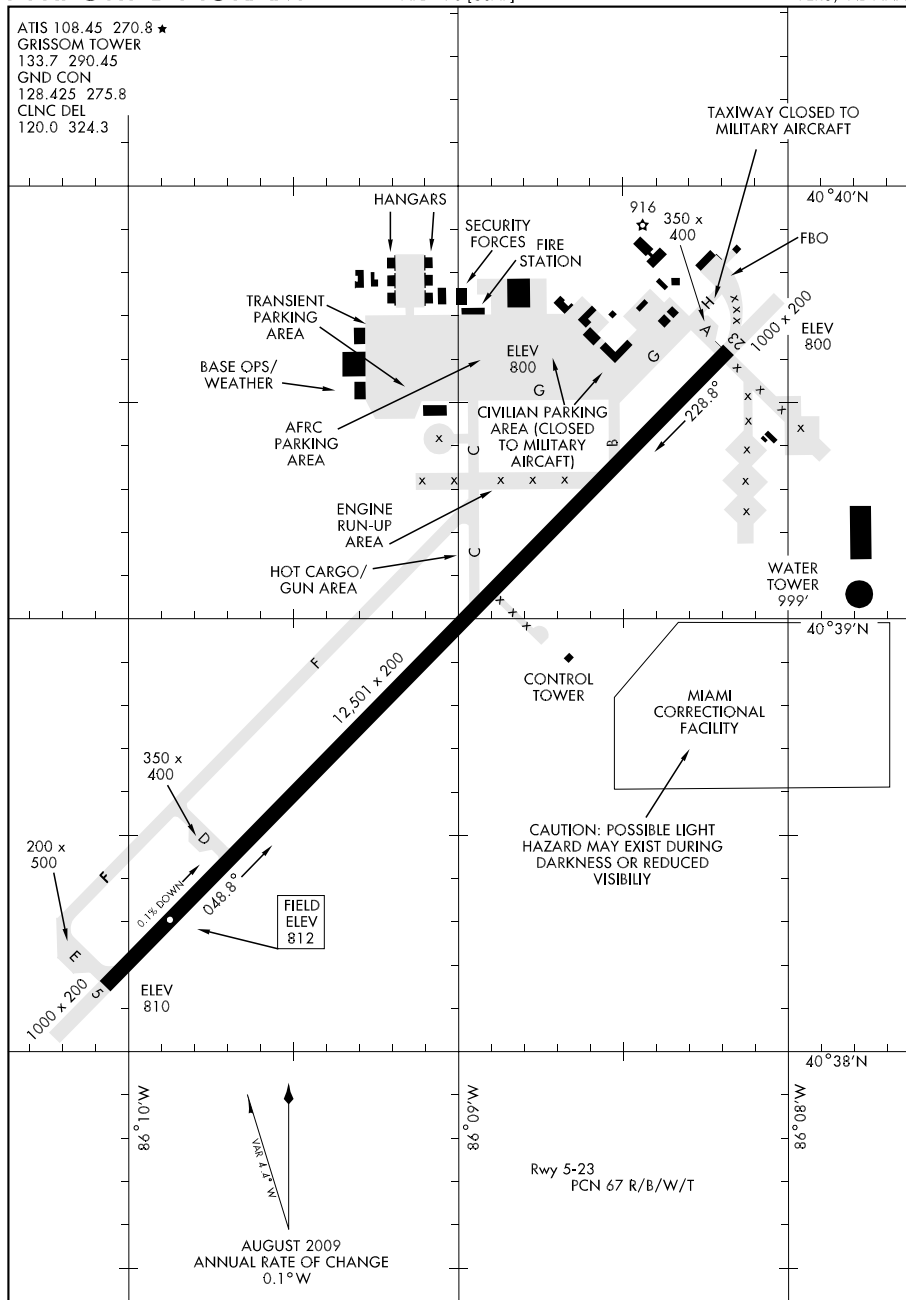
09239

## AIRPORT DIAGRAM

AFD-470 [USAF]

GRISSOM ARB (KGUS)

PERU, INDIANA



## AIRPORT DIAGRAM

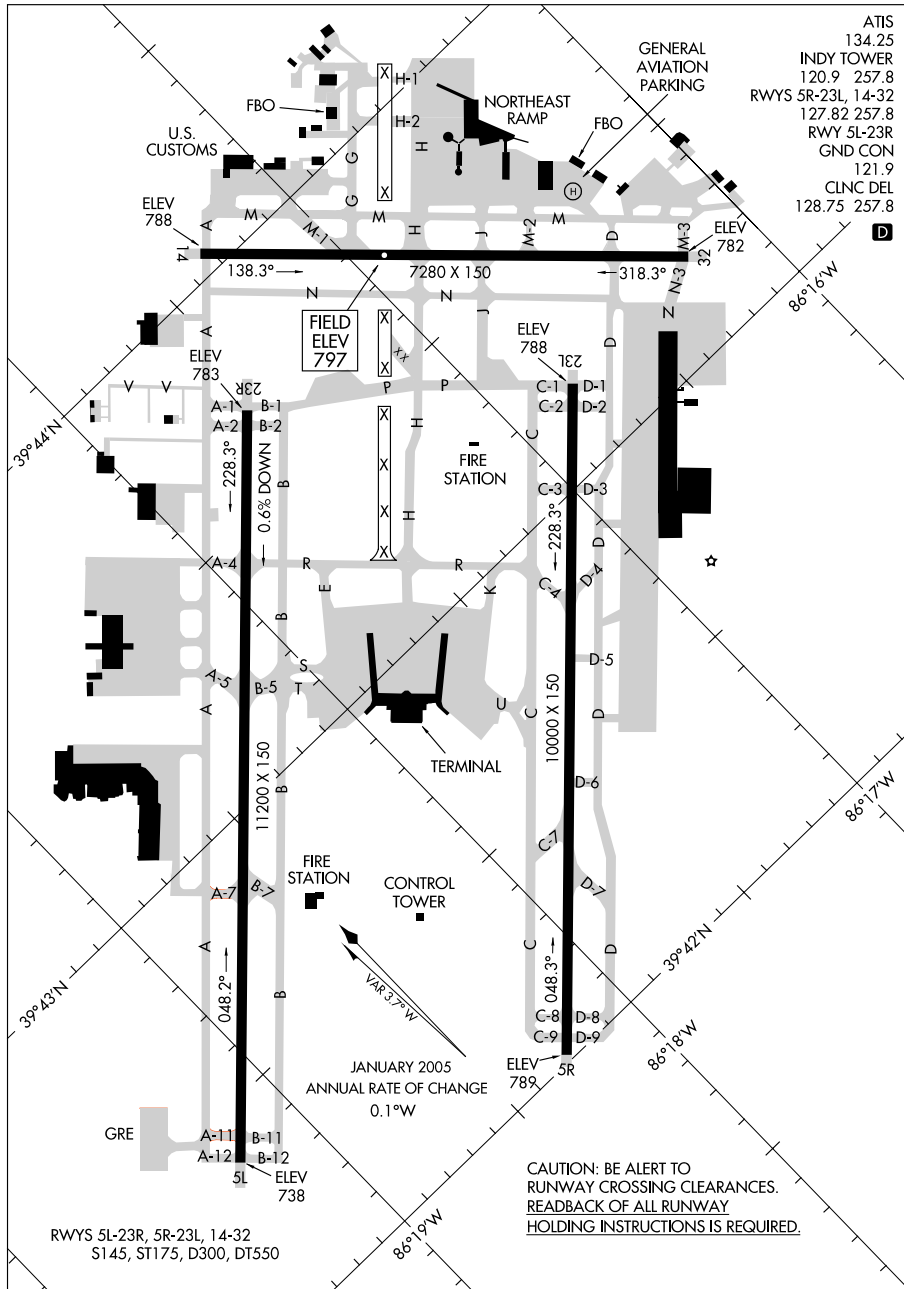
PERU, INDIANA

GRISSOM ARB (KGUS)

09295

## AIRPORT DIAGRAM

AL-203 (FAA)

INDIANAPOLIS INTL (IND)  
INDIANAPOLIS, INDIANA

## AIRPORT DIAGRAM

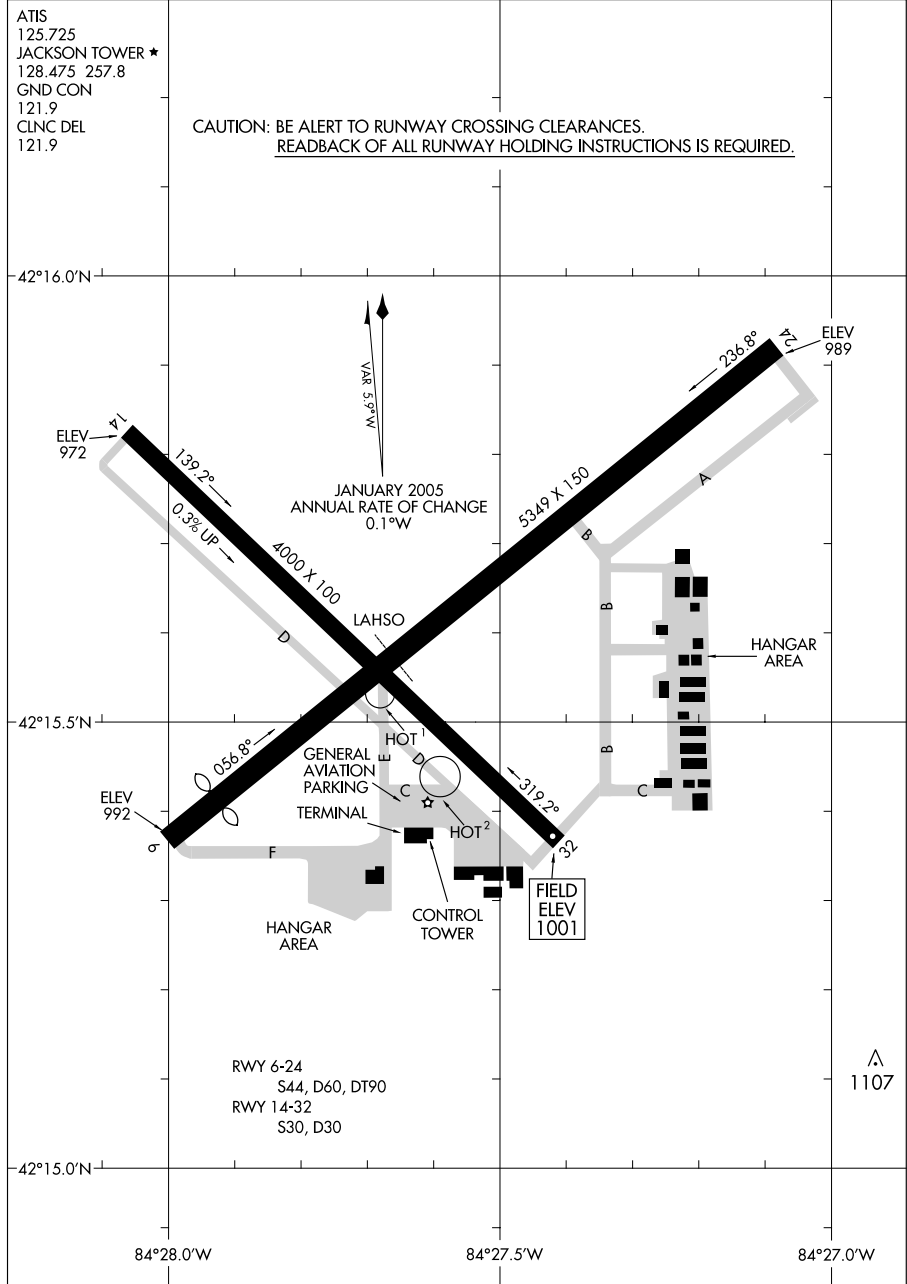
09295

INDIANAPOLIS, INDIANA  
INDIANAPOLIS INTL (IND)

09295

## AIRPORT DIAGRAM

AL-861 (FAA)

JACKSON COUNTY-REYNOLDS FIELD (JXXN)  
JACKSON, MICHIGAN

## AIRPORT DIAGRAM

09295

JACKSON, MICHIGAN  
JACKSON COUNTY-REYNOLDS FIELD (JXXN)

JANESVILLE, WISCONSIN



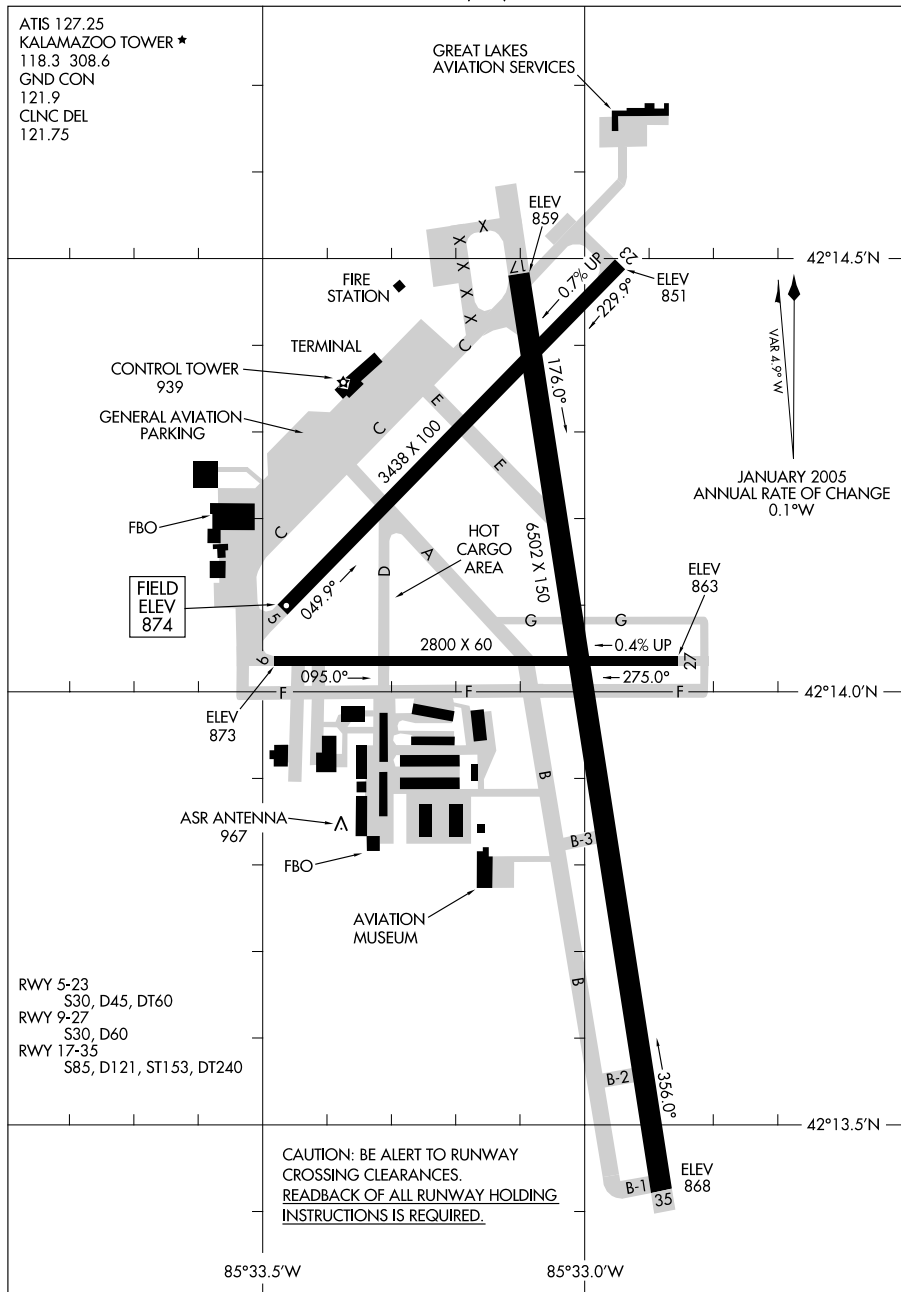
09071

08325

## AIRPORT DIAGRAM

KALAMAZOO/ BATTLE CREEK INTL (AZO)  
KALAMAZOO, MICHIGAN

AL-717 (FAA)



## AIRPORT DIAGRAM

08325

KALAMAZOO, MICHIGAN  
KALAMAZOO/ BATTLE CREEK INTL (AZO)

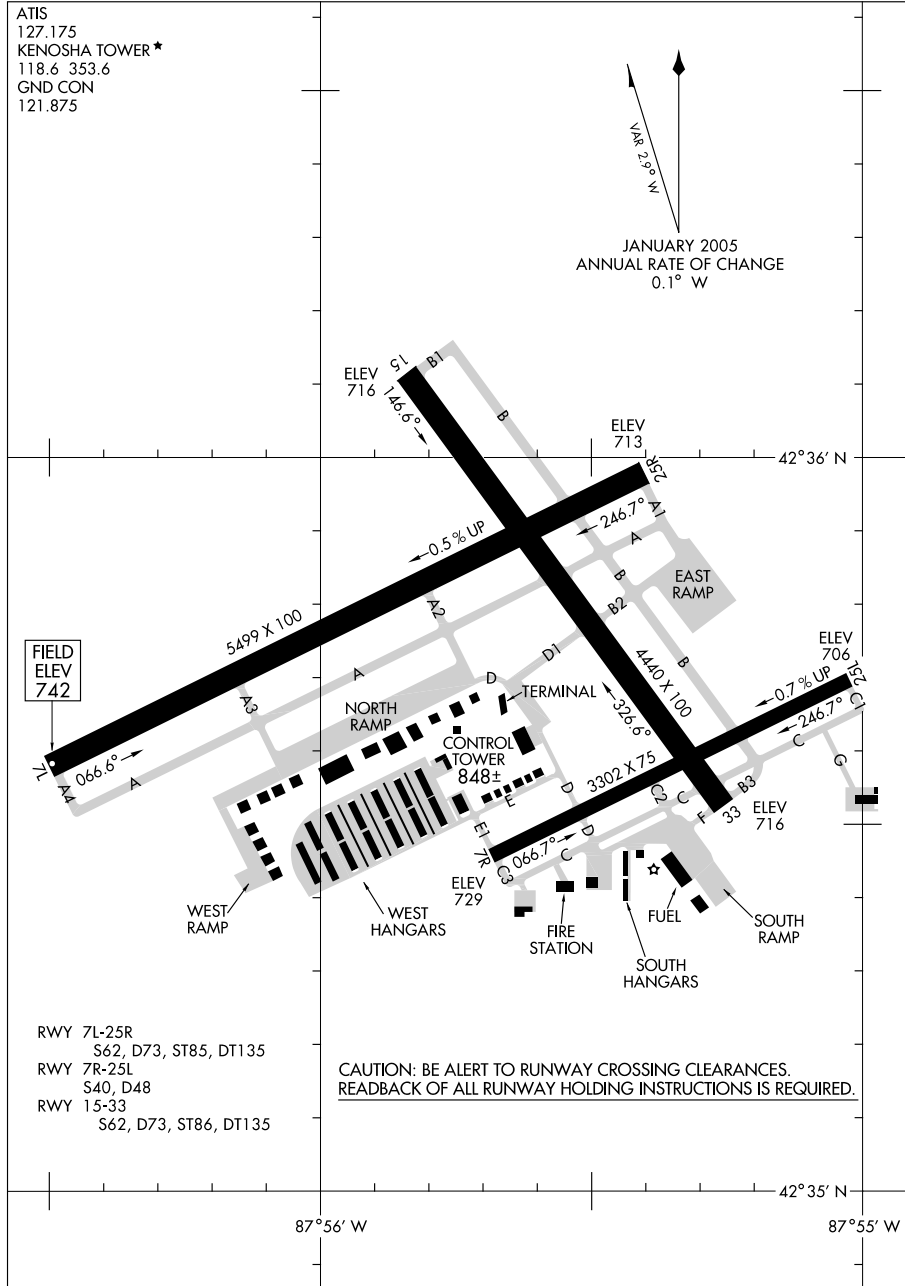


09239

# AIRPORT DIAGRAM

AL-5449 (FAA)

KENOSHA RGNL (E,N,W)  
KENOSHA, WISCONSIN



# AIRPORT DIAGRAM

09239

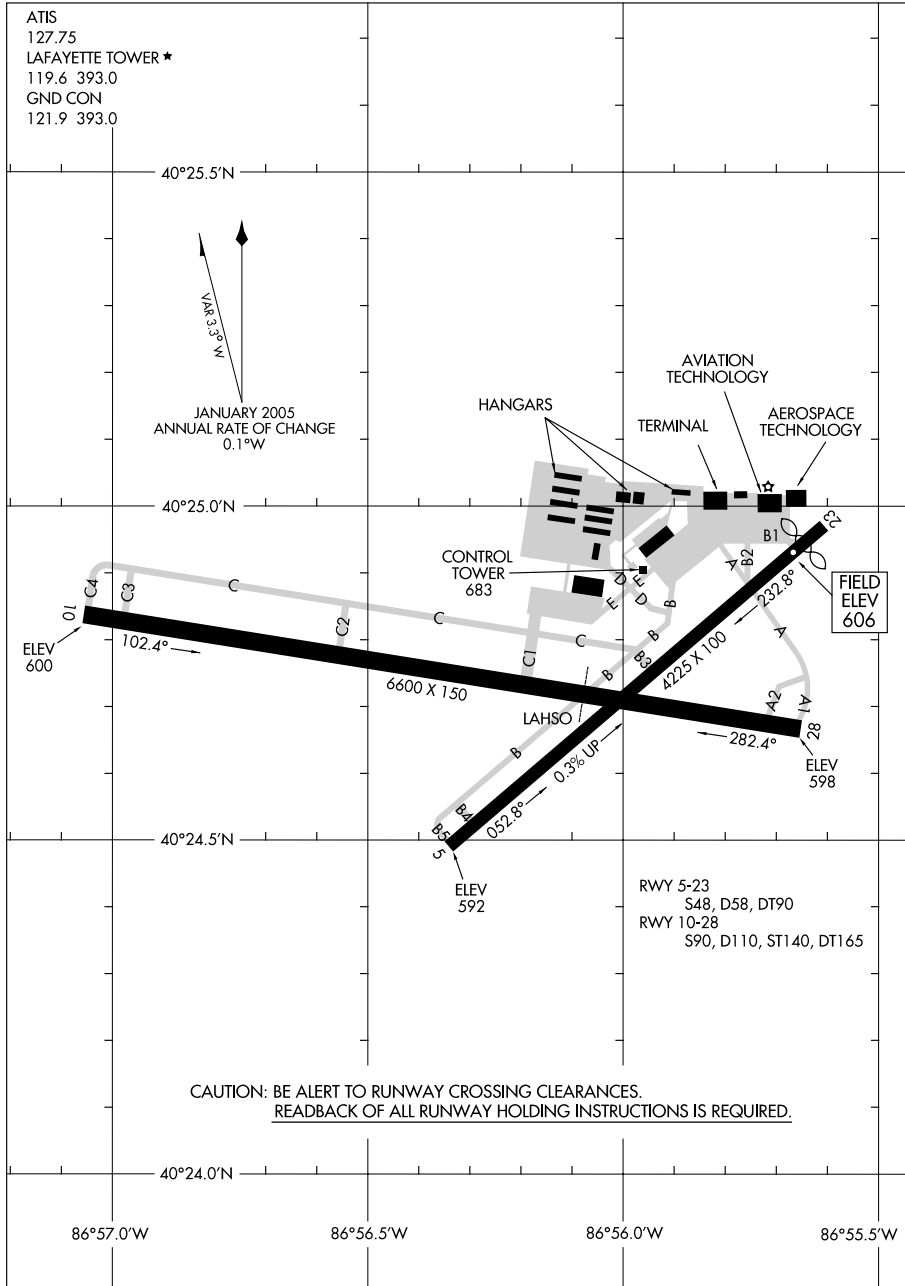
KENOSHA, WISCONSIN  
KENOSHA RGNL (E,N,W)



09071

## AIRPORT DIAGRAM

AL-220 (FAA)

LAFAYETTE/ PURDUE UNIVERSITY (LAF)  
LAFAYETTE, INDIANA

## AIRPORT DIAGRAM

09071

LAFAYETTE, INDIANA  
LAFAYETTE/ PURDUE UNIVERSITY (LAF)



09295

## AIRPORT DIAGRAM

MADISON/DANE COUNTY RGNL TRUAX FIELD (MSN)  
AL-245 (FAA) MADISON, WISCONSIN

ATIS

124.65 278.3

MADISON TOWER\*

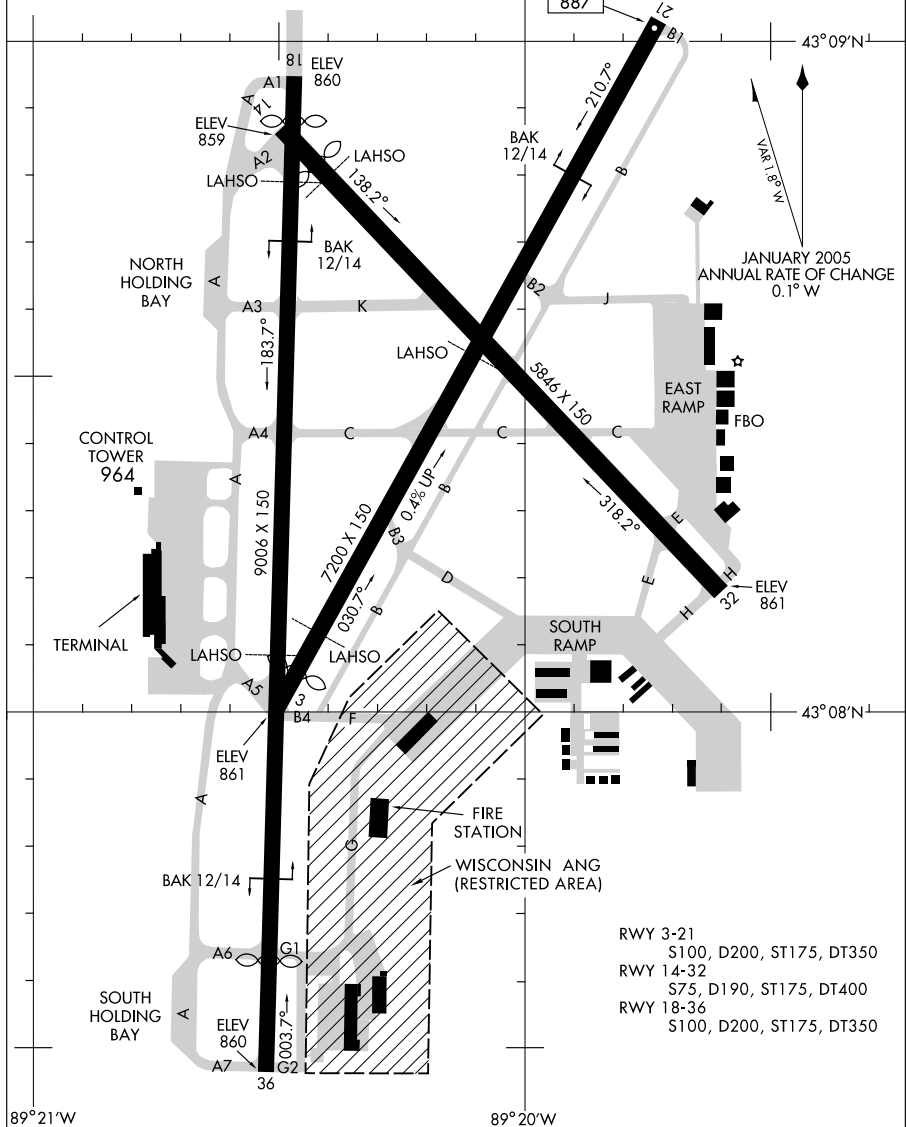
119.3 257.8

GND CON

121.9 348.6

CLNC DEL

121.62

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

## AIRPORT DIAGRAM

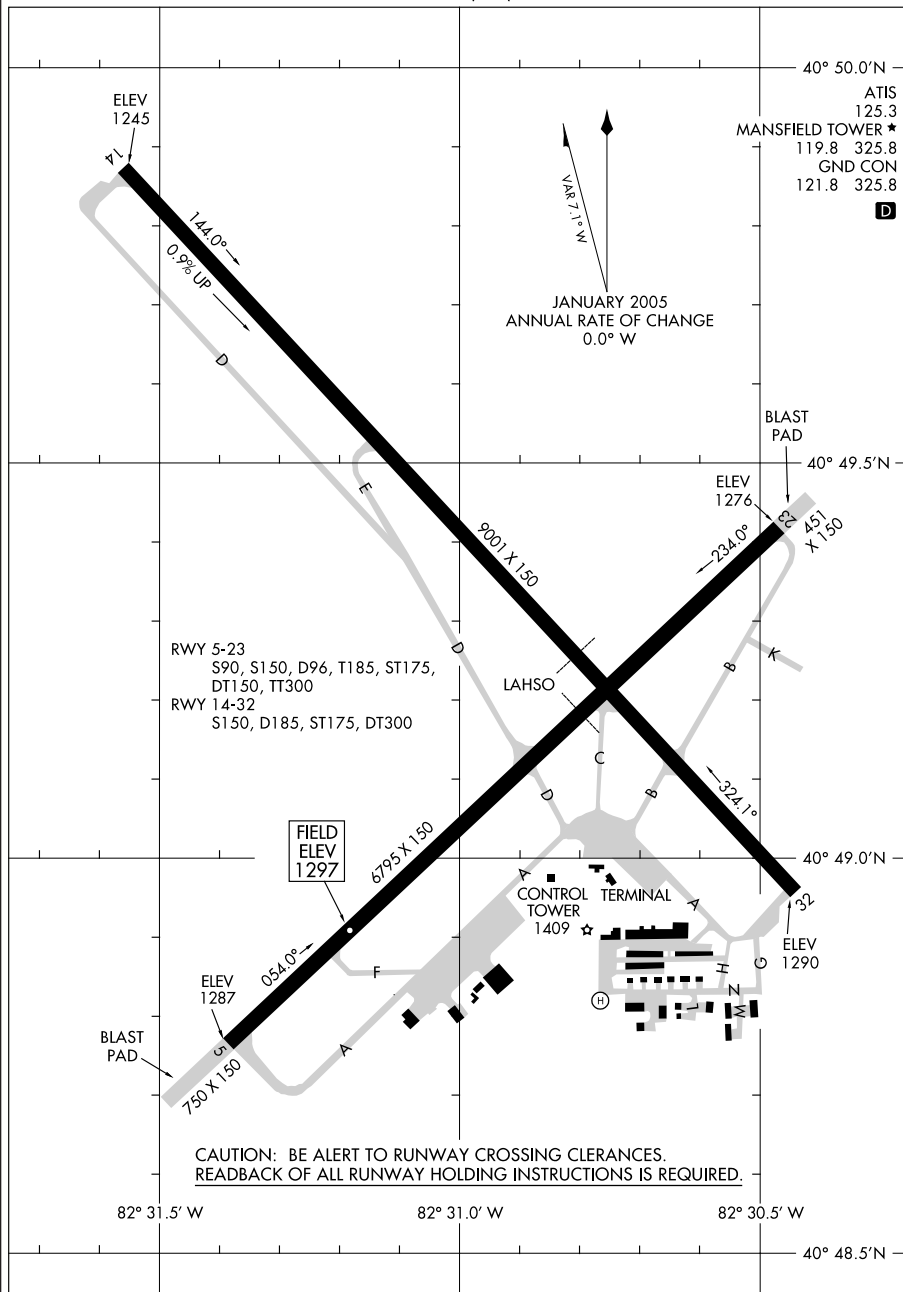
09295

MADISON, WISCONSIN  
MADISON/DANE COUNTY RGNL TRUAX FIELD (MSN)

09295

## AIRPORT DIAGRAM

AL-860 (FAA)

MANSFIELD LAHM RGNL (MFD)  
MANSFIELD, OHIO

## AIRPORT DIAGRAM

09295

MANSFIELD, OHIO  
MANSFIELD LAHM RGNL (MFD)

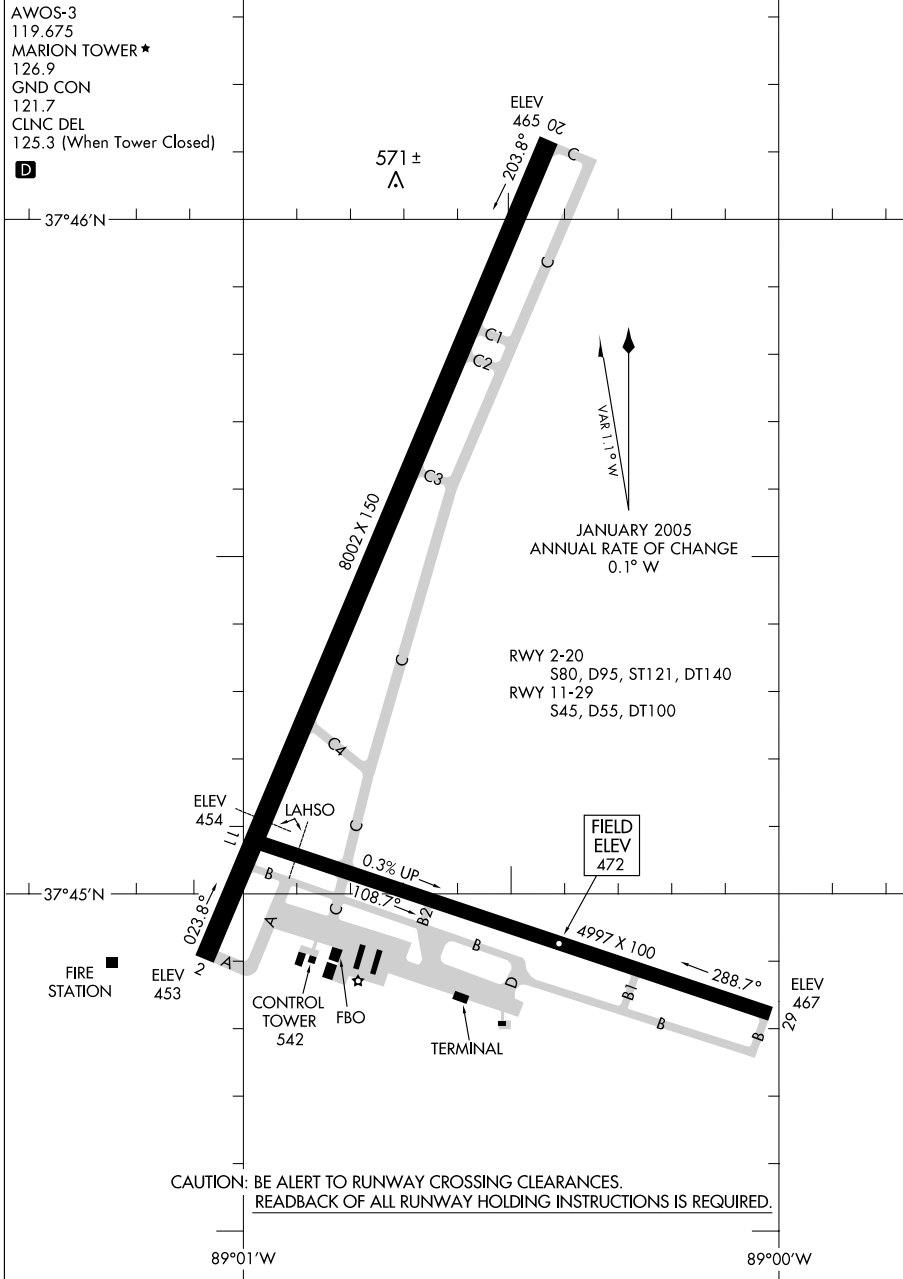
09295

## AIRPORT DIAGRAM

AL-5215 (FAA)

MARION / WILLIAMSON COUNTY RGNL (MWA)

MARION, ILLINOIS



## AIRPORT DIAGRAM

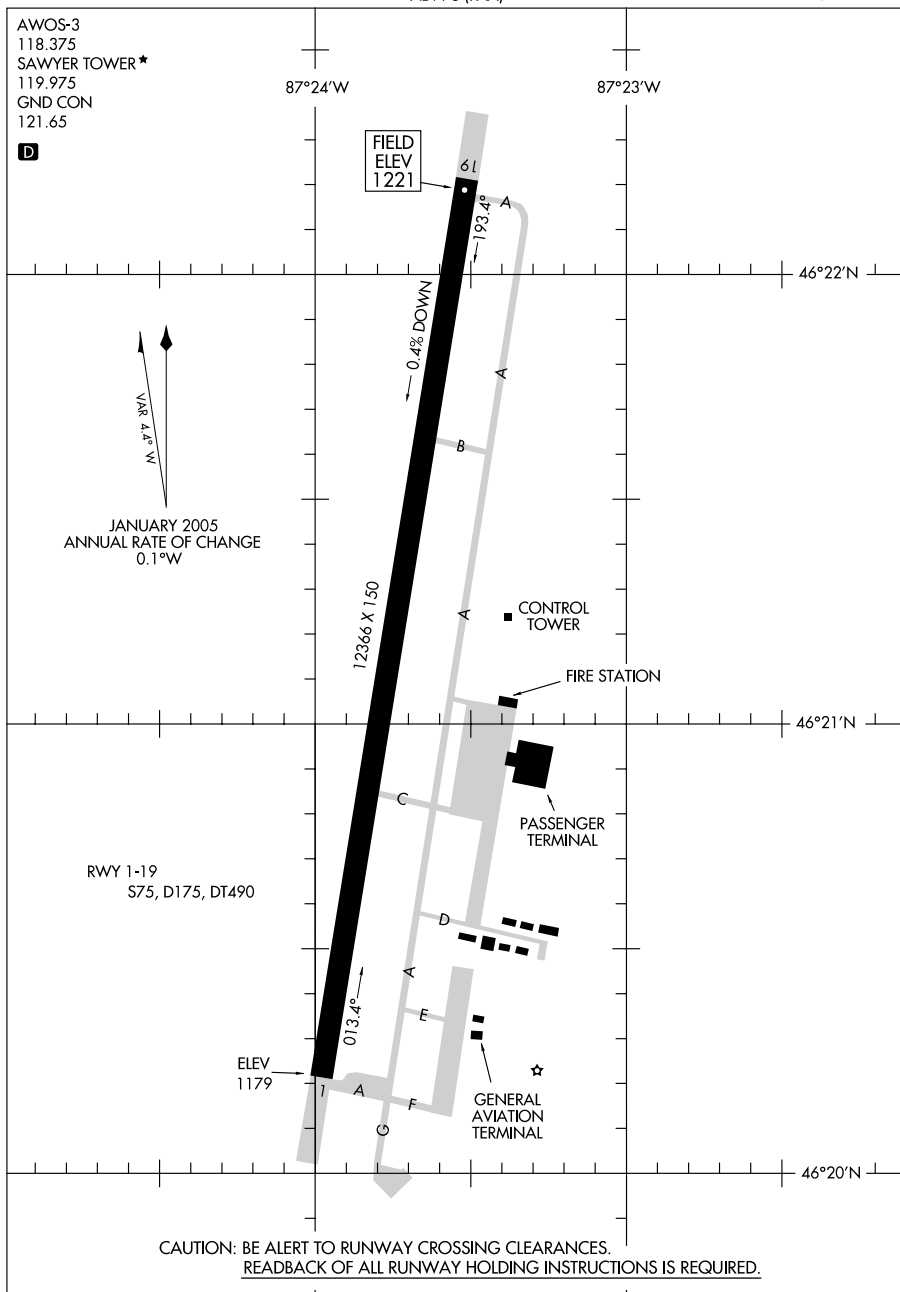
09295

MARION, ILLINOIS  
MARION / WILLIAMSON COUNTY RGNL (MWA)

09295

## AIRPORT DIAGRAM

AL-773 (FAA)

MARQUETTE/ SAWYER INTL (SAW)  
MARQUETTE, MICHIGAN

## AIRPORT DIAGRAM

09295

MARQUETTE, MICHIGAN  
MARQUETTE/ SAWYER INTL (SAW)





09295

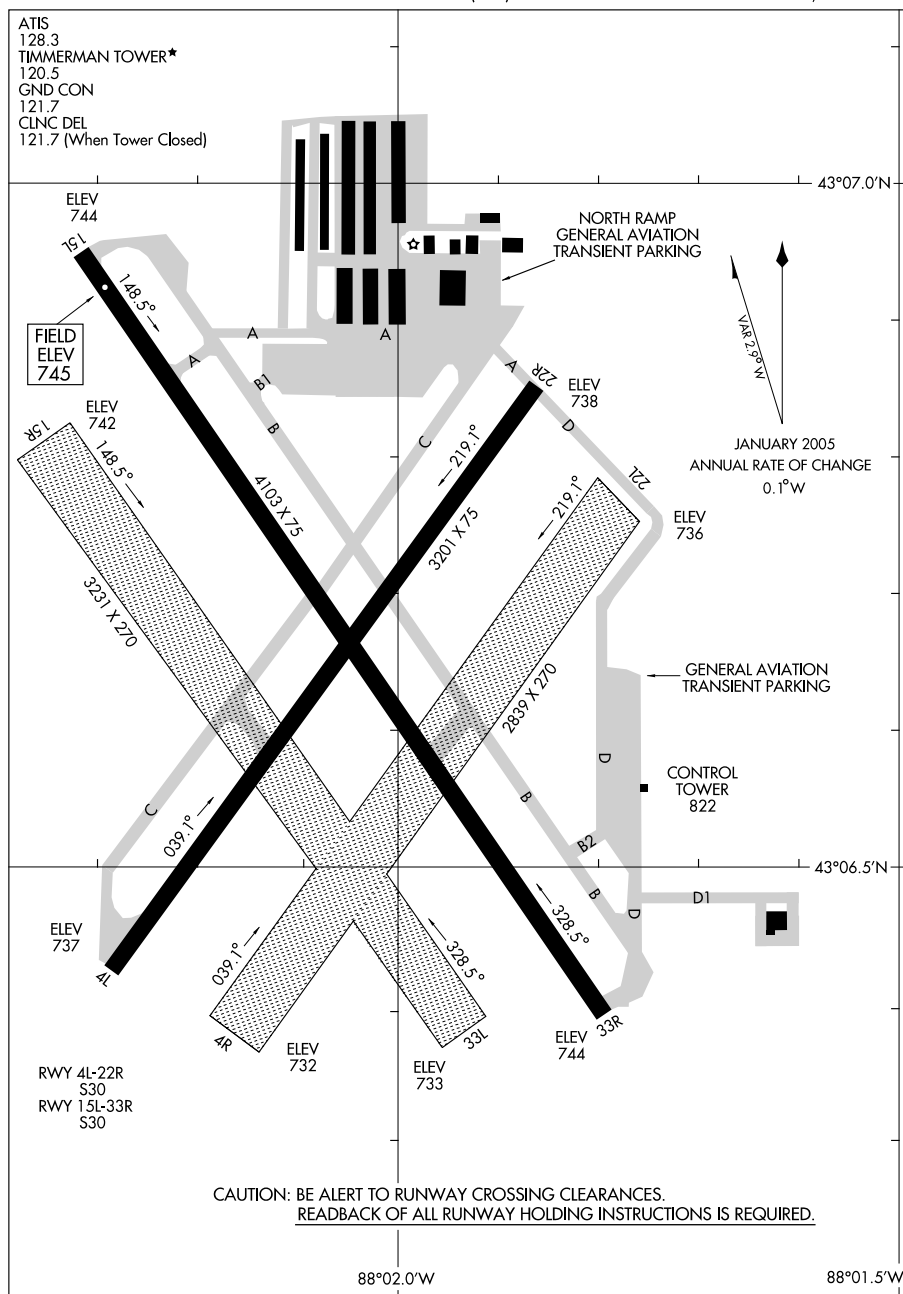
## AIRPORT DIAGRAM

MILWAUKEE/ LAWRENCE J. TIMMERMAN (MWC)

AL-5077 (FAA)

MILWAUKEE, WISCONSIN

ATIS  
128.3  
TIMMERMAN TOWER★  
120.5  
GND CON  
121.7  
CLNC DEL  
121.7 (When Tower Closed)



## AIRPORT DIAGRAM

09295

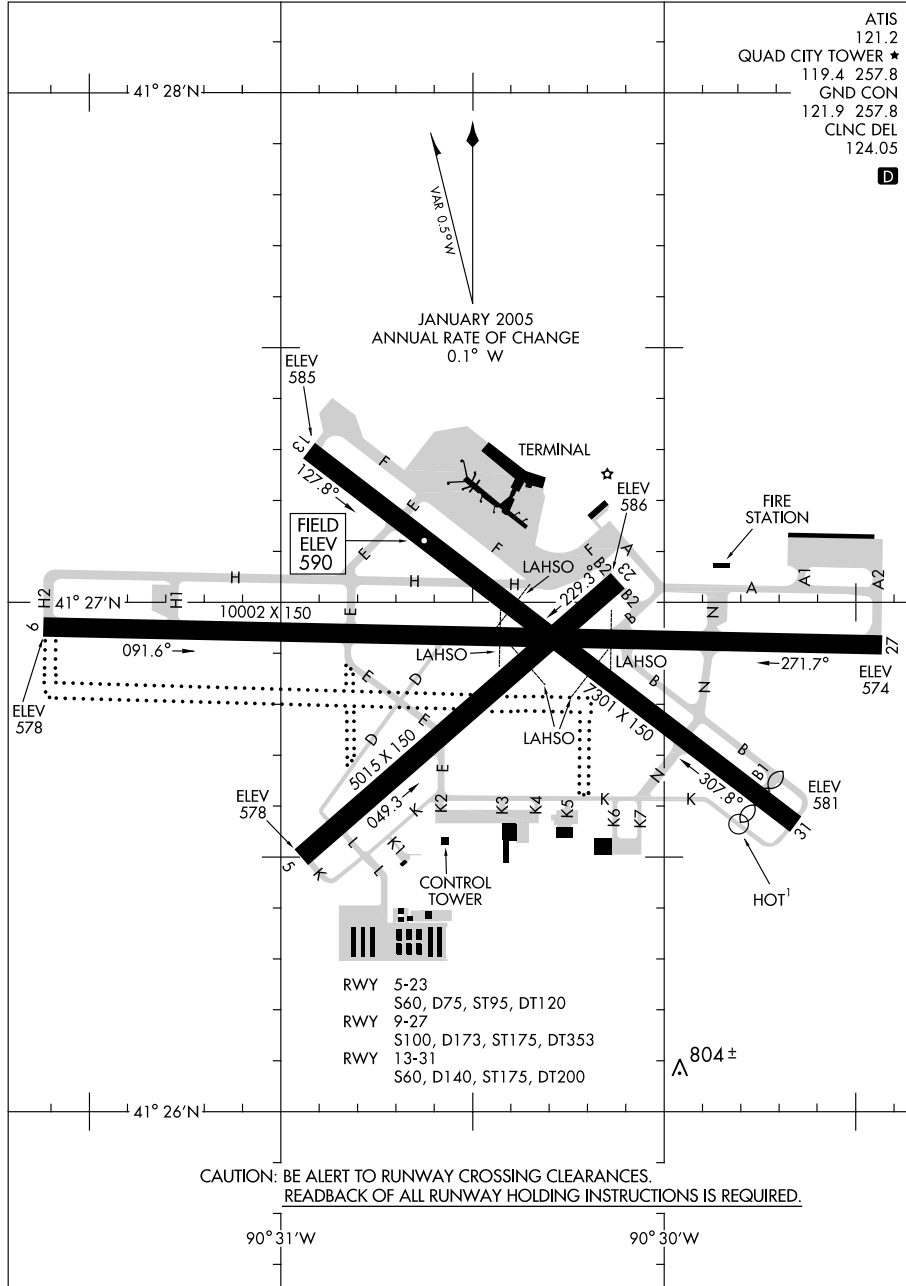
MILWAUKEE, WISCONSIN  
MILWAUKEE/ LAWRENCE J. TIMMERMAN (MWC)

09295

# AIRPORT DIAGRAM

AL-269 (FAA)

MOLINE/QUAD CITY INTL (MLI)  
MOLINE, ILLINOIS



# AIRPORT DIAGRAM

09295

MOLINE, ILLINOIS  
MOLINE/QUAD CITY INTL (MLI)

09295

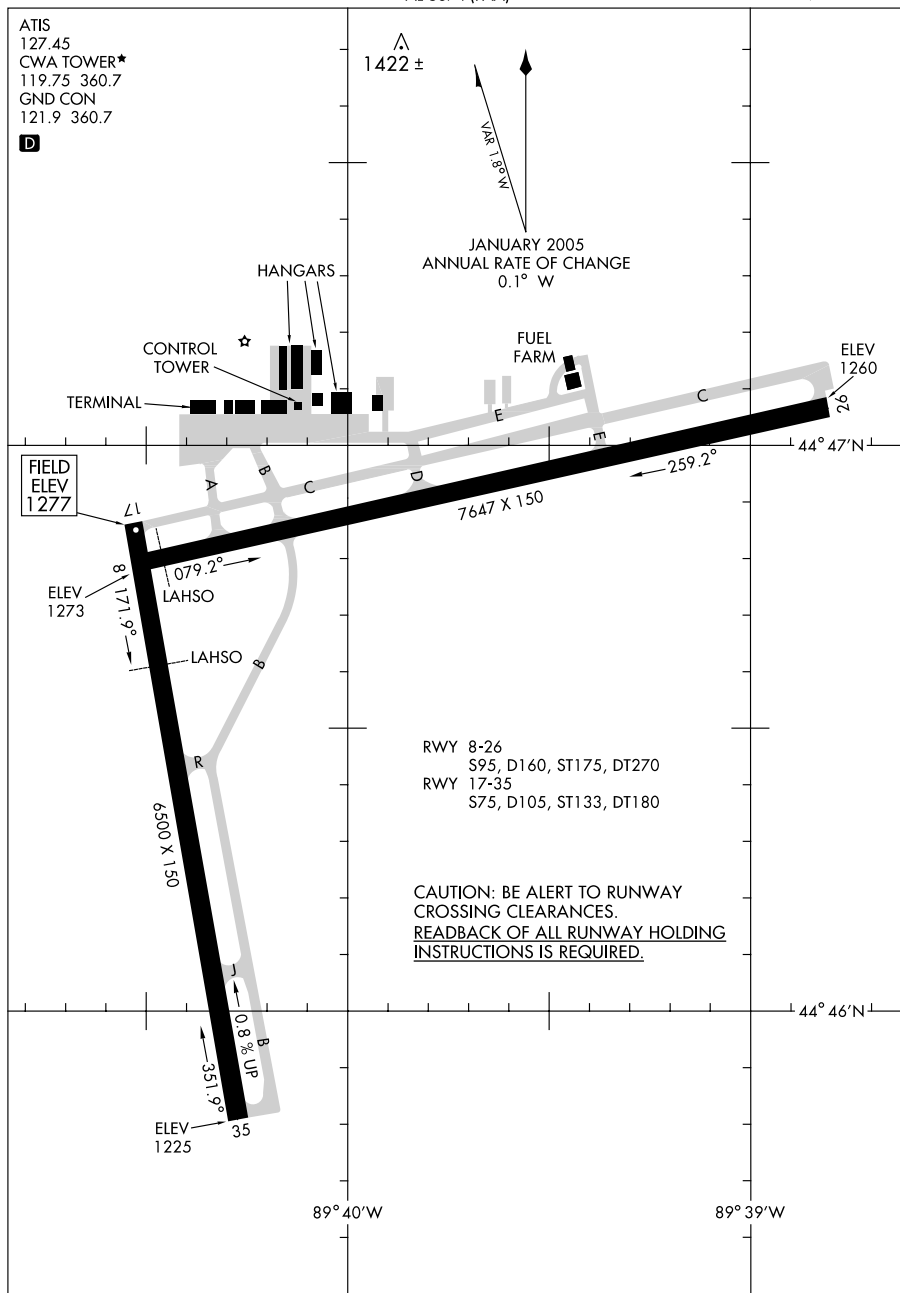
## AIRPORT DIAGRAM

MOSINEE/CENTRAL WISCONSIN (CWA)  
MOSINEE, WISCONSIN

AL-5674 (FAA)

ATIS  
127.45  
CWA TOWER\*  
119.75 360.7  
GND CON  
121.9 360.7

D



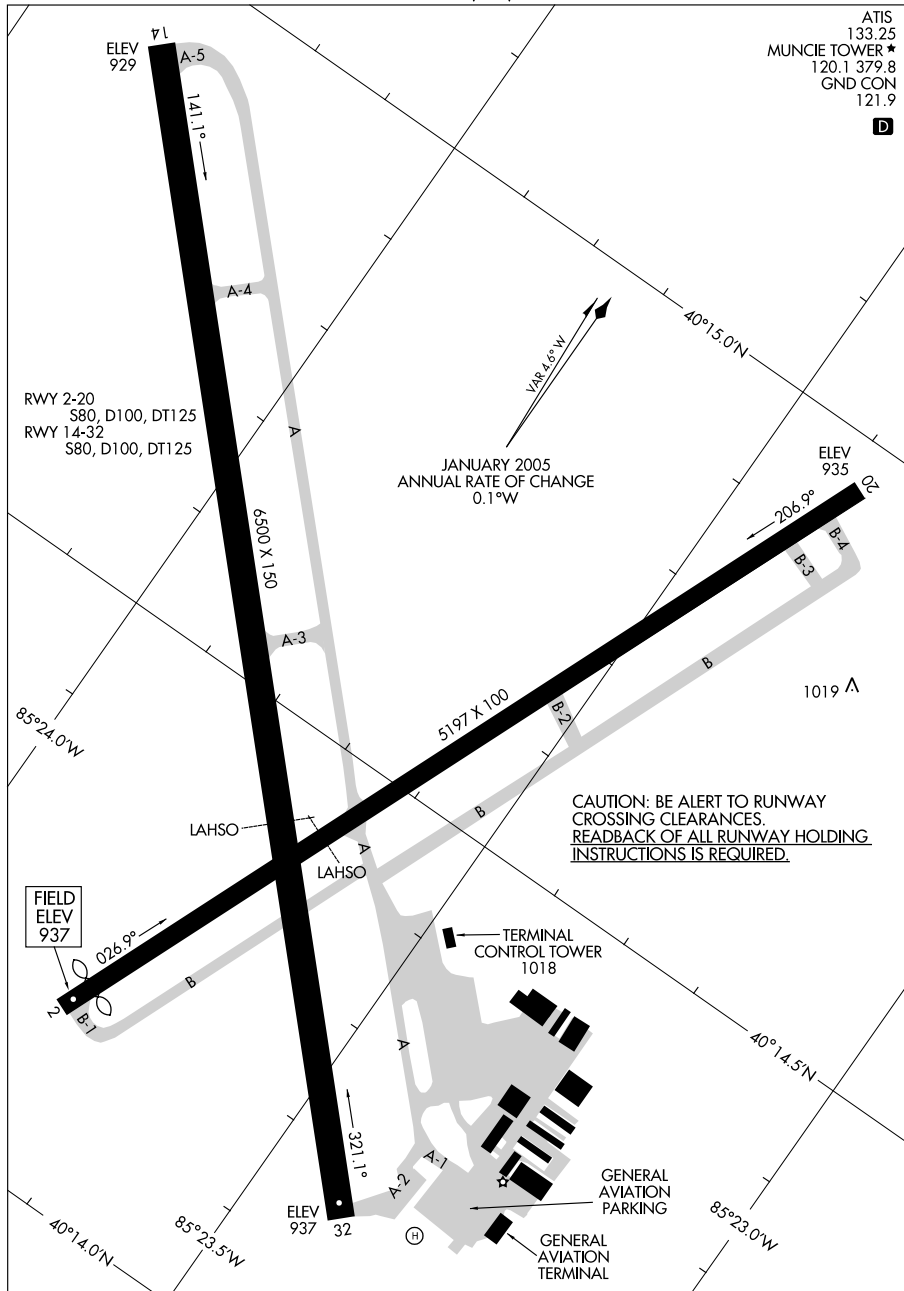
## AIRPORT DIAGRAM

09295

MOSINEE, WISCONSIN  
MOSINEE/CENTRAL WISCONSIN (CWA)

09295

## AIRPORT DIAGRAM

MUNCIE/DELAWARE COUNTY-JOHNSON FIELD (MIE)  
AL-5011 (FAA) MUNCIE, INDIANA

## AIRPORT DIAGRAM

09295

MUNCIE, INDIANA  
MUNCIE/DELAWARE COUNTY-JOHNSON FIELD (MIE)

09295

## AIRPORT DIAGRAM

AL-278 (FAA)

MUSKEGON COUNTY (MKG)  
MUSKEGON, MICHIGAN

ATIS

124.3

MUSKEGON TOWER \*

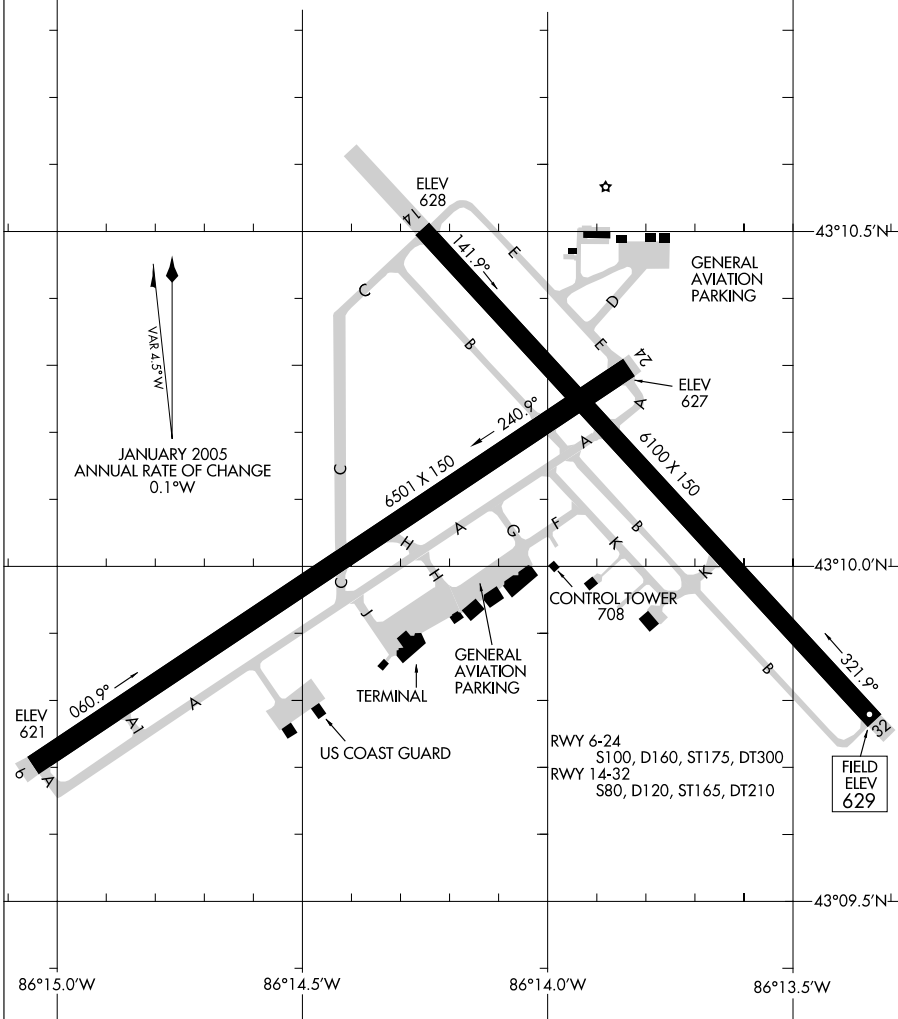
126.25 363.1

GND CON

121.6

D

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.



## AIRPORT DIAGRAM

09295

MUSKEGON, MICHIGAN  
MUSKEGON COUNTY (MKG)

09295

# AIRPORT DIAGRAM

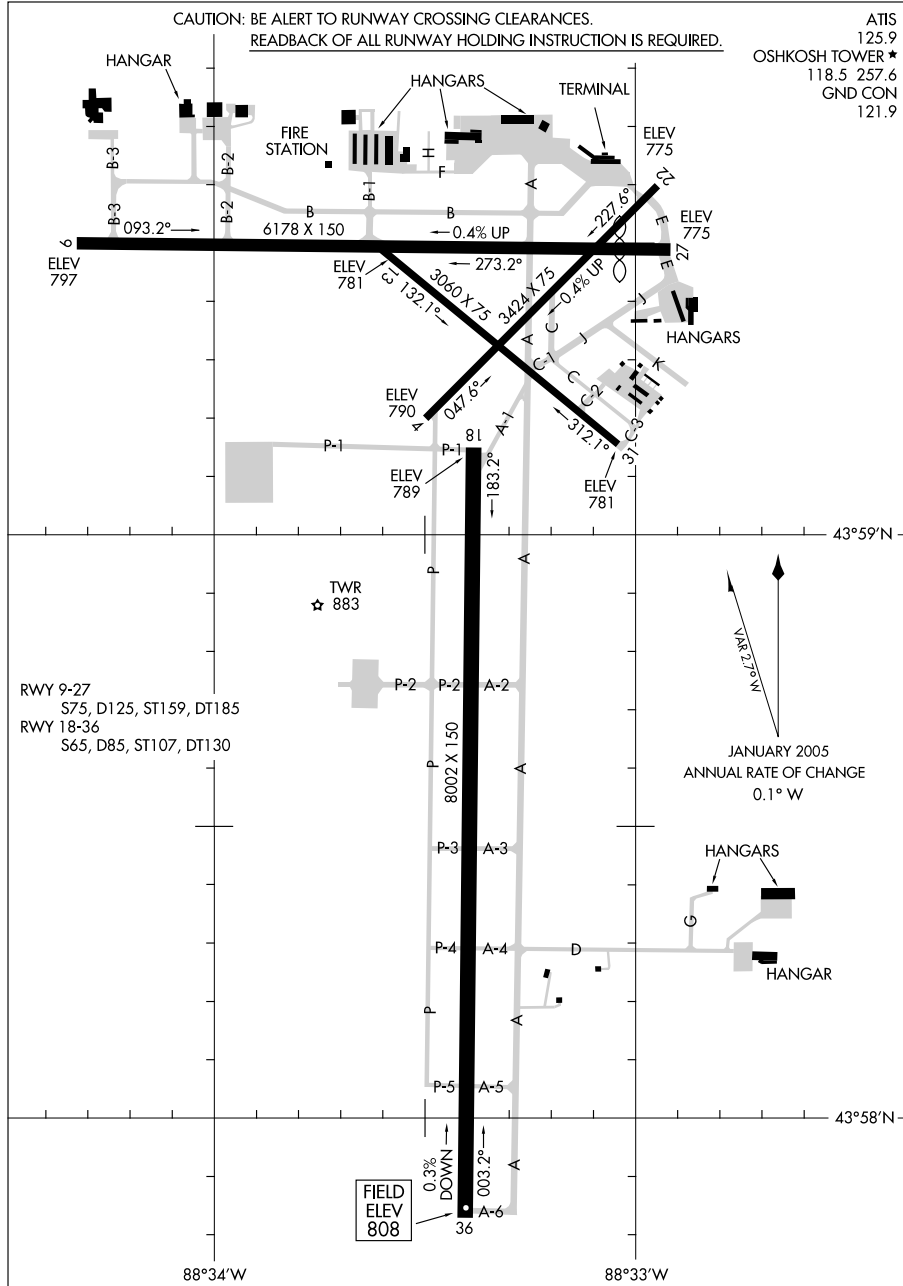
AL-730 (FAA)

OSHKOSH/ WITTMAN RGNL (OSH)  
OSHKOSH, WISCONSIN

ATIS  
125.9  
OSHKOSH TOWER ★  
118.5 257.6  
GND CON  
121.9

CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.

READBACK OF ALL RUNWAY HOLDING INSTRUCTION IS REQUIRED.



## AIRPORT DIAGRAM

09295

OSHKOSH, WISCONSIN  
OSHKOSH/ WITTMAN RGNL (OSH)





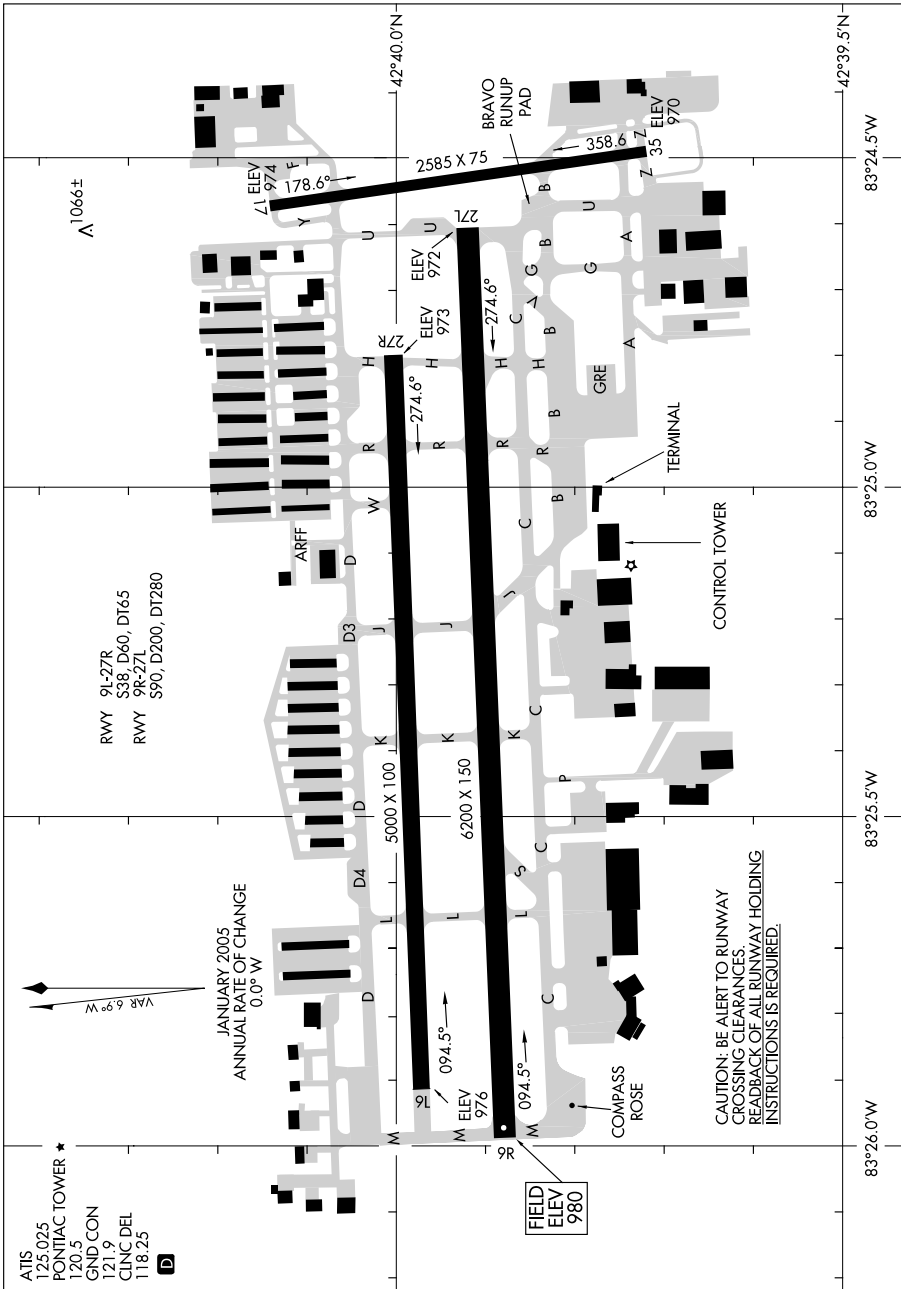
09295

## AIRPORT DIAGRAM

PONTIAC/OAKLAND COUNTY INTL (PTK)

PONTIAC, MICHIGAN

AL-5052 (FAA)



## AIRPORT DIAGRAM

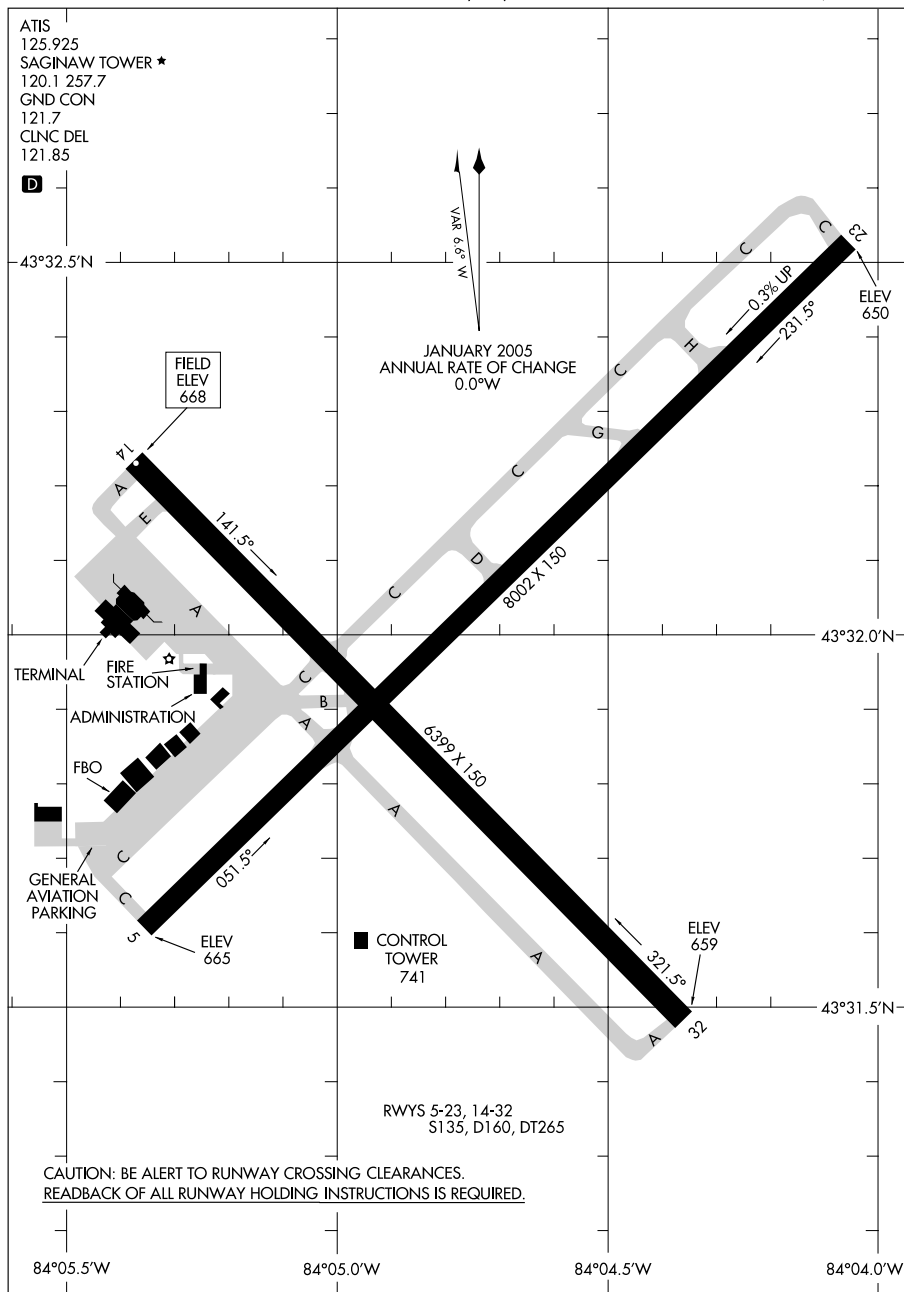
09295

PONTIAC, MICHIGAN  
PONTIAC/OAKLAND COUNTY INTL (PTK)

09295

## AIRPORT DIAGRAM

AL-648 (FAA)

SAGINAW / MBS INTL (MBS)  
SAGINAW, MICHIGAN

## AIRPORT DIAGRAM

09295

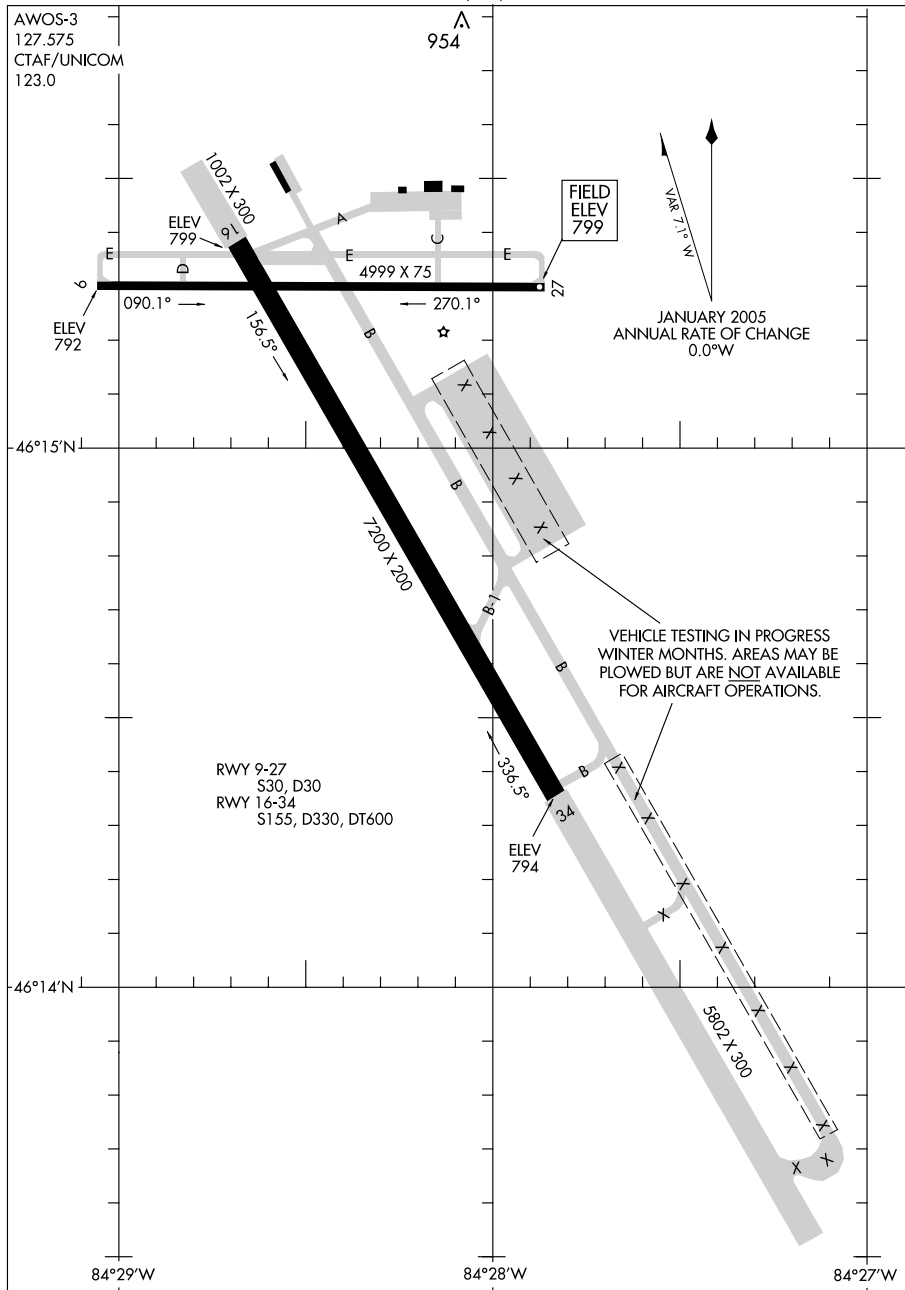
SAGINAW, MICHIGAN  
SAGINAW / MBS INTL (MBS)

09071

## AIRPORT DIAGRAM

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

SAULT STE MARIE, MICHIGAN



## AIRPORT DIAGRAM

09071

SAULT STE MARIE, MICHIGAN

SAULT STE MARIE/CHIPPEWA COUNTY INTL (CIU)

05216

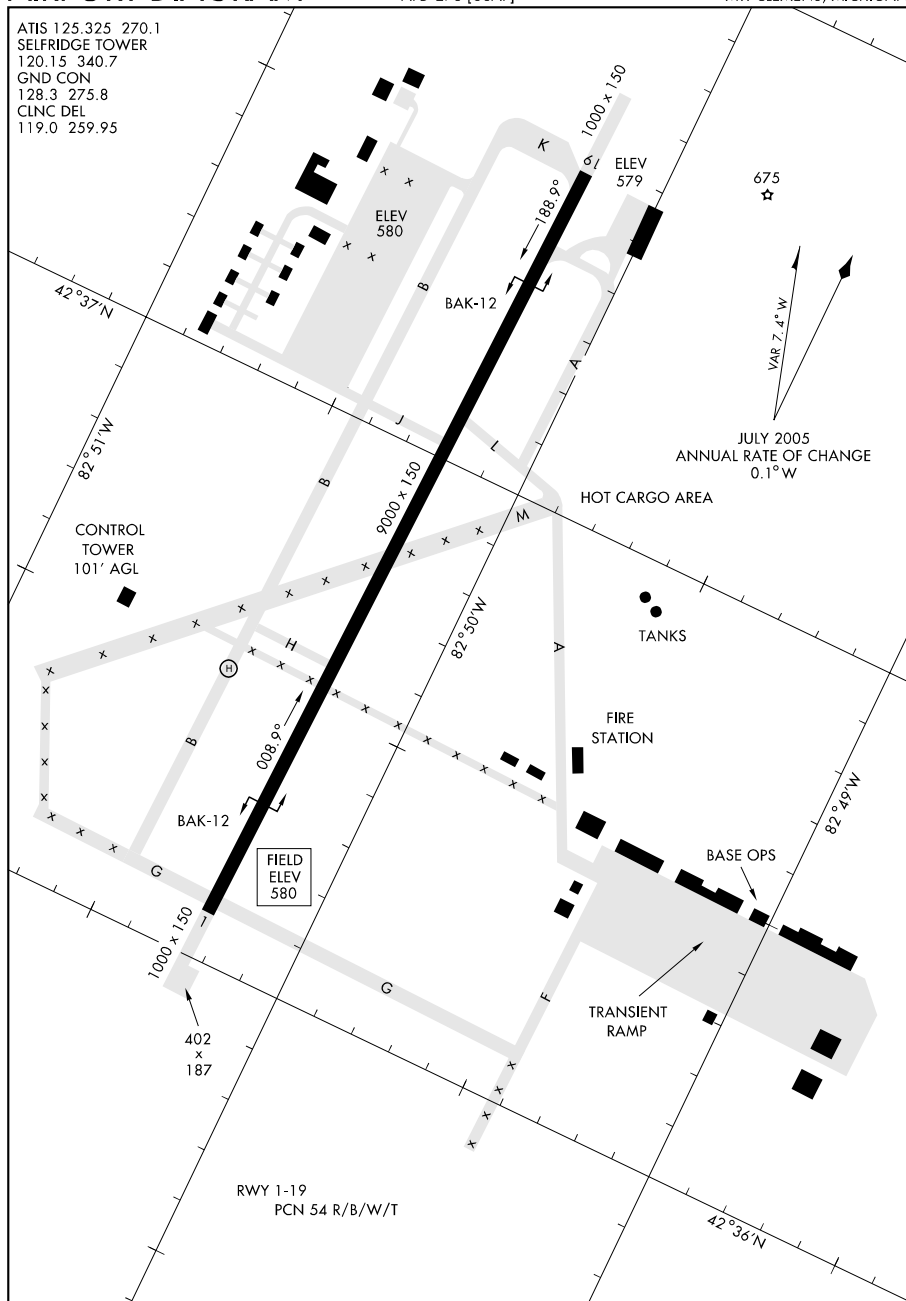
## AIRPORT DIAGRAM

AFD-276 [USAF]

SELFRIDGE ANGB (KMTCT)

MT. CLEMENS, MICHIGAN

ATIS 125.325 270.1  
 SELFRIDGE TOWER  
 120.15 340.7  
 GND CON  
 128.3 275.8  
 CLNC DEL  
 119.0 259.95



## AIRPORT DIAGRAM

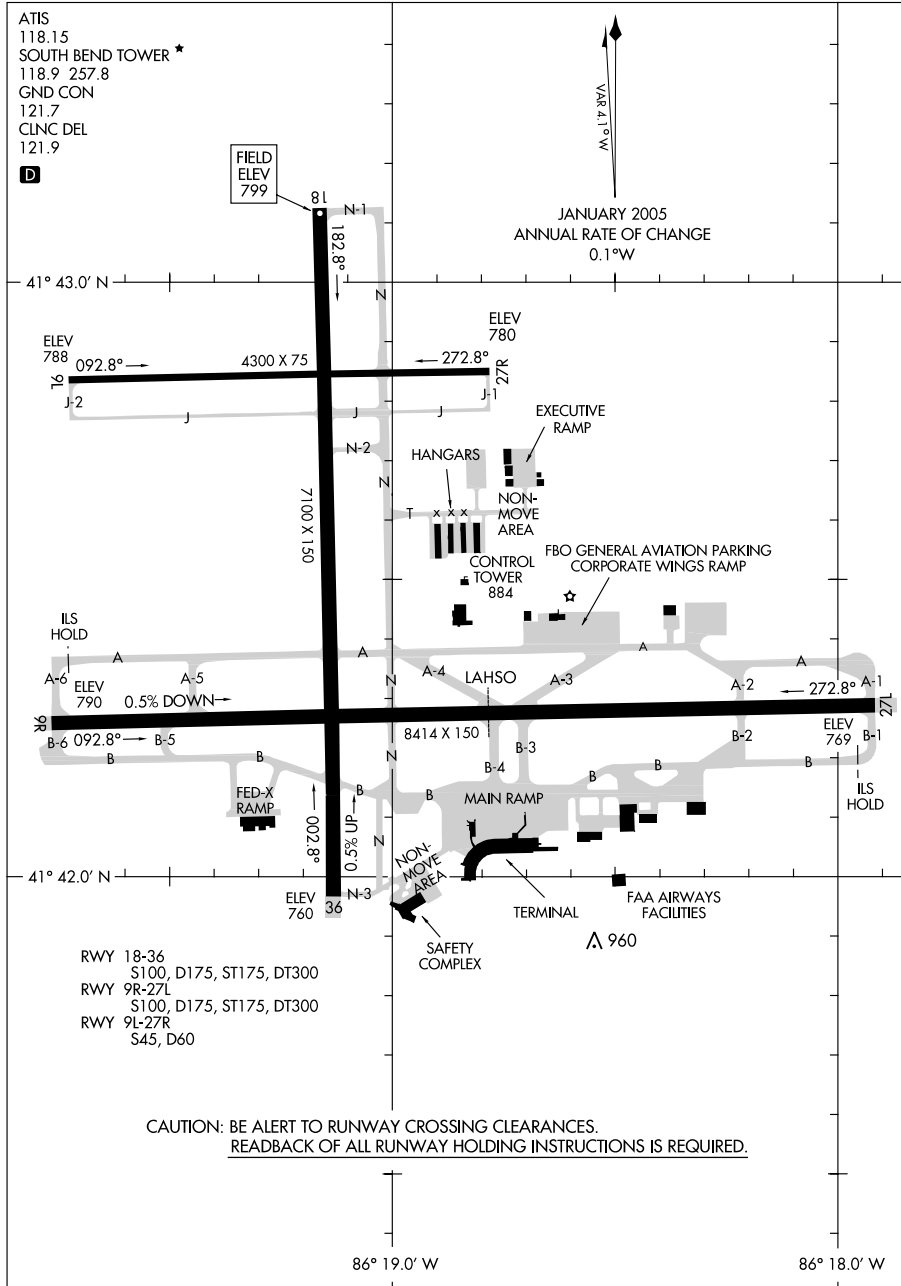
WGS DATUM

MT. CLEMENS, MICHIGAN  
 SELFRIDGE ANGB (KMTCT)

09295

## AIRPORT DIAGRAM

AL-399 (FAA)

SOUTH BEND RGNL (SBN)  
SOUTH BEND, INDIANA

## AIRPORT DIAGRAM

09295

SOUTH BEND, INDIANA  
SOUTH BEND RGNL (SBN)

09295

## AIRPORT DIAGRAM

SPRINGFIELD/ABRAHAM LINCOLN CAPITAL (SPI)

AL-518 (FAA)

SPRINGFIELD, ILLINOIS

ATIS

127.65 270.1

SPRINGFIELD TOWER ★

121.3 257.8

GND CON

121.9 348.6

CLNC DEL

121.7

D

RWY 4-22

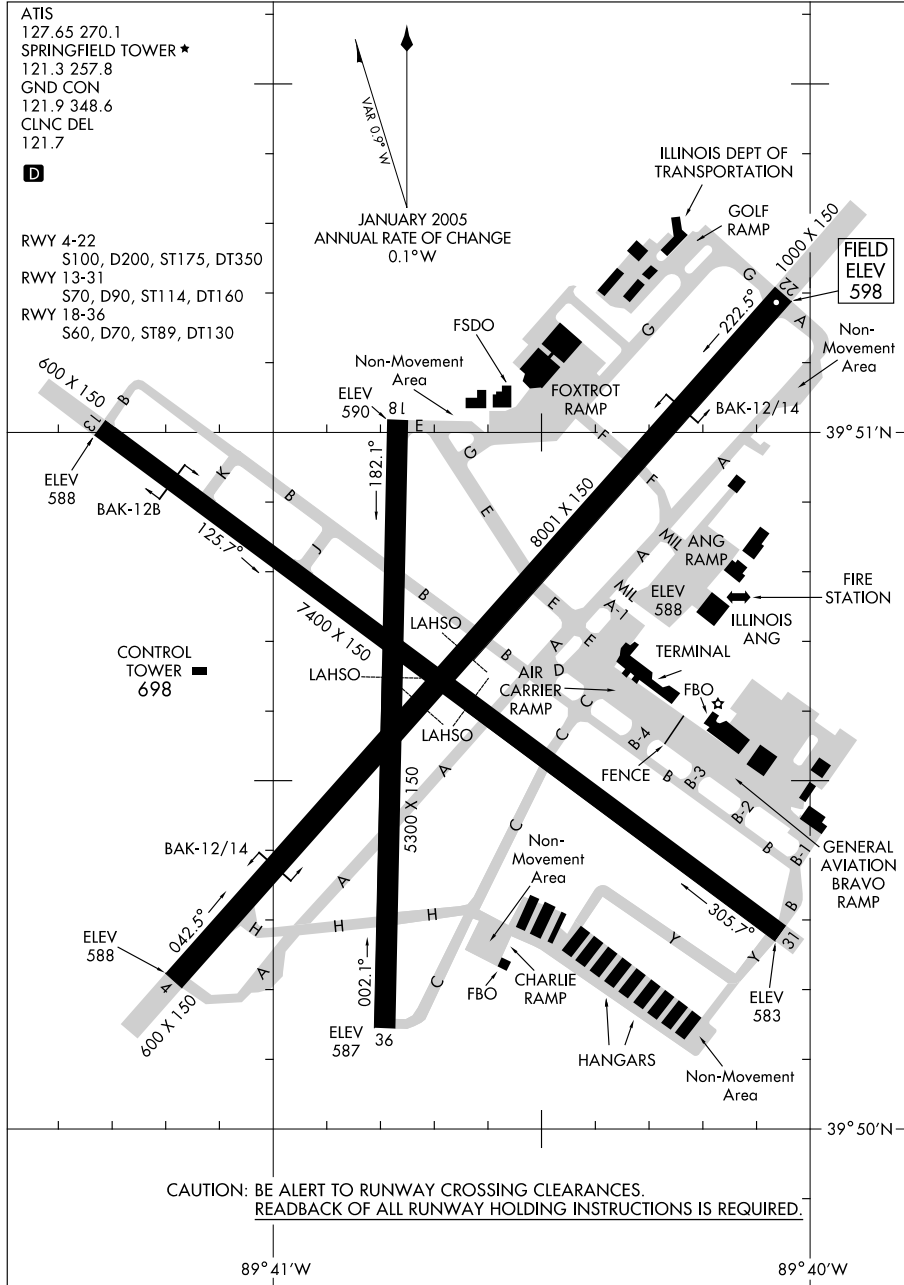
S100, D200, ST175, DT350

RWY 13-31

S70, D90, ST114, DT160

RWY 18-36

S60, D70, ST89, DT130



CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.  
REARBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

## AIRPORT DIAGRAM

09295

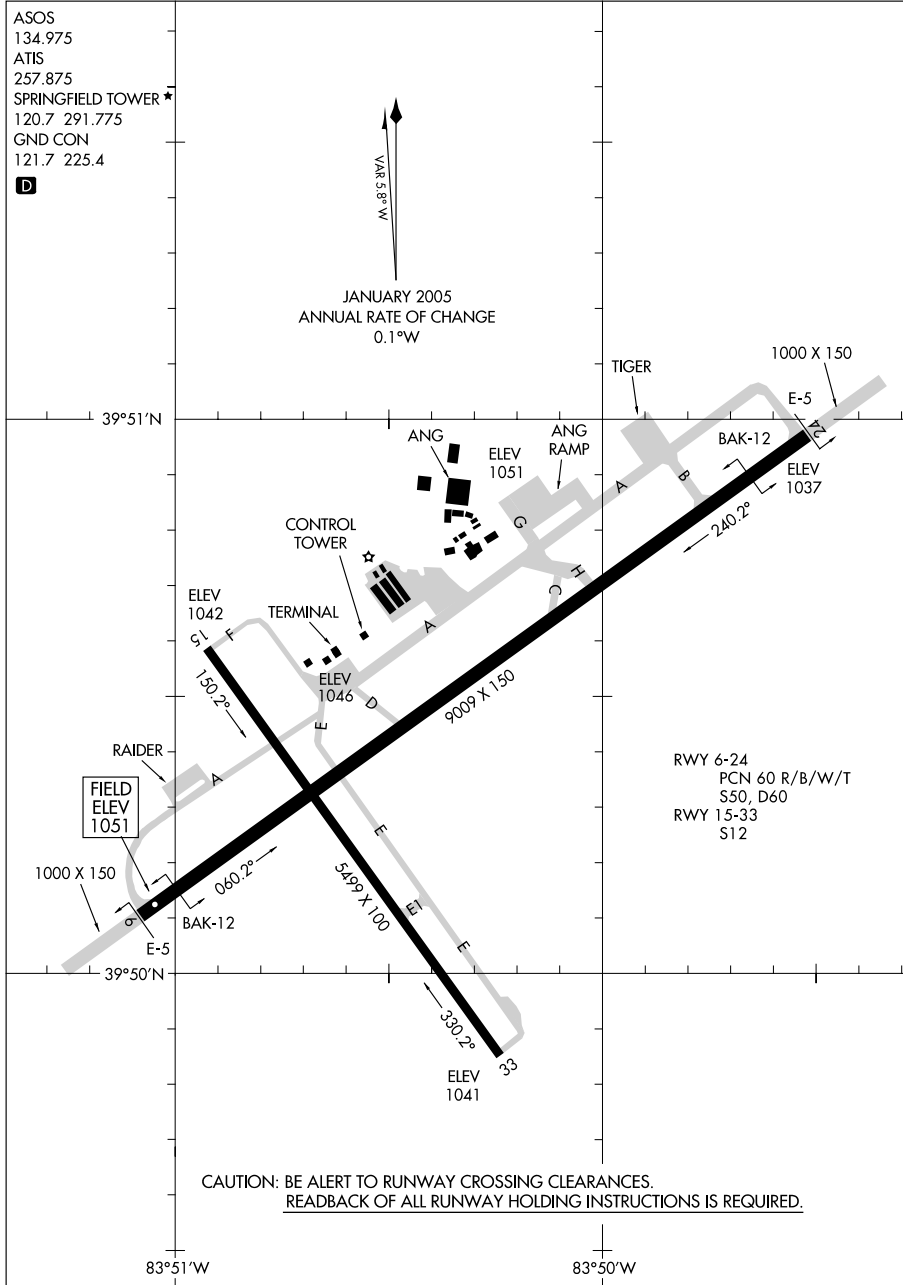
SPRINGFIELD, ILLINOIS

SPRINGFIELD/ABRAHAM LINCOLN CAPITAL (SPI)

09295

## AIRPORT DIAGRAM

AL-958 (FAA)

SPRINGFIELD-BECKLEY MUNI (SGH)  
SPRINGFIELD, OHIO

## AIRPORT DIAGRAM

09295

SPRINGFIELD, OHIO  
SPRINGFIELD-BECKLEY MUNI (SGH)





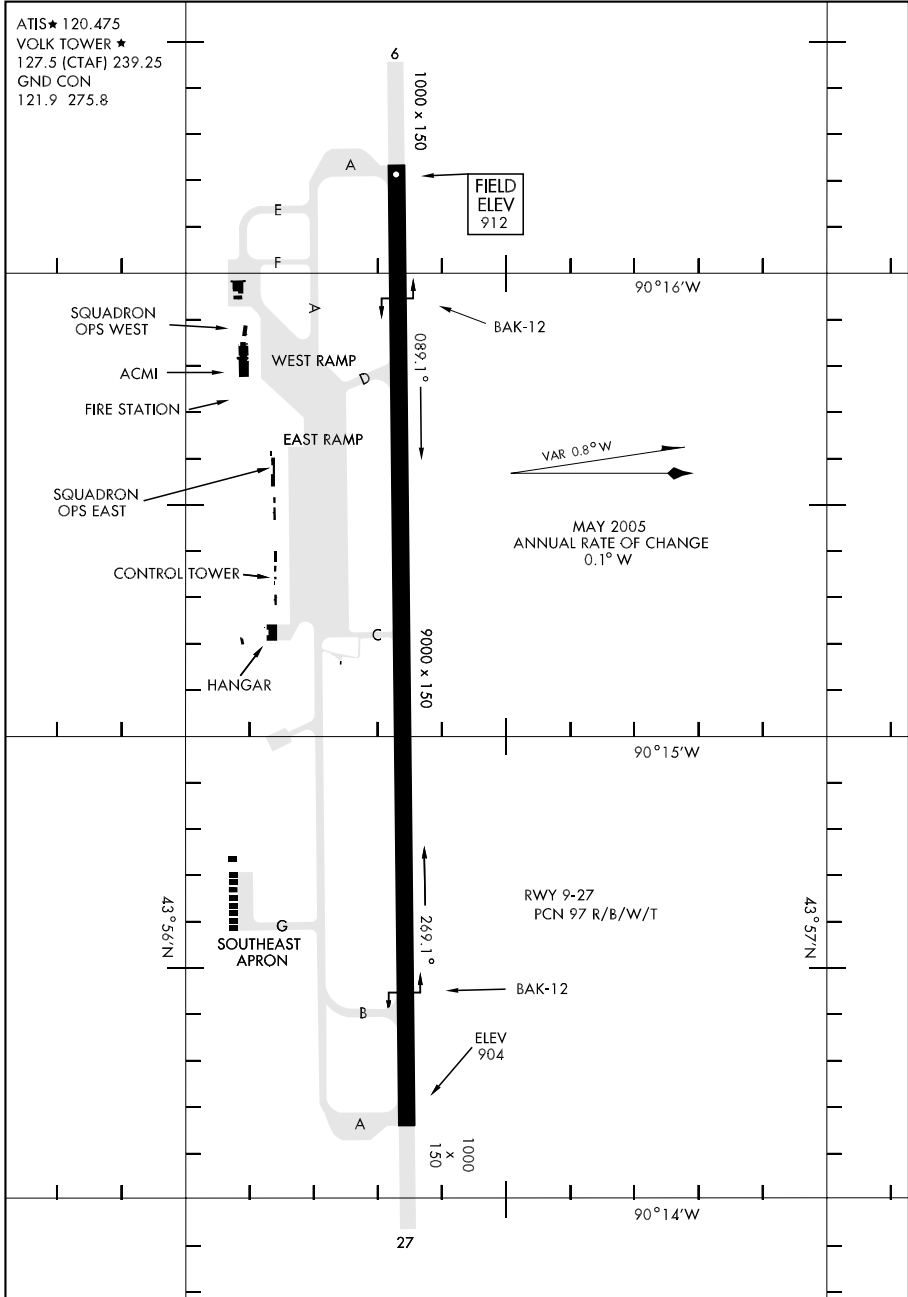




06271

## AIRPORT DIAGRAM

AFD-714 [USAF]

VOLK FIELD (VOK)  
CAMP DOUGLAS, WISCONSIN

AIRPORT DIAGRAM

WGS DATUM

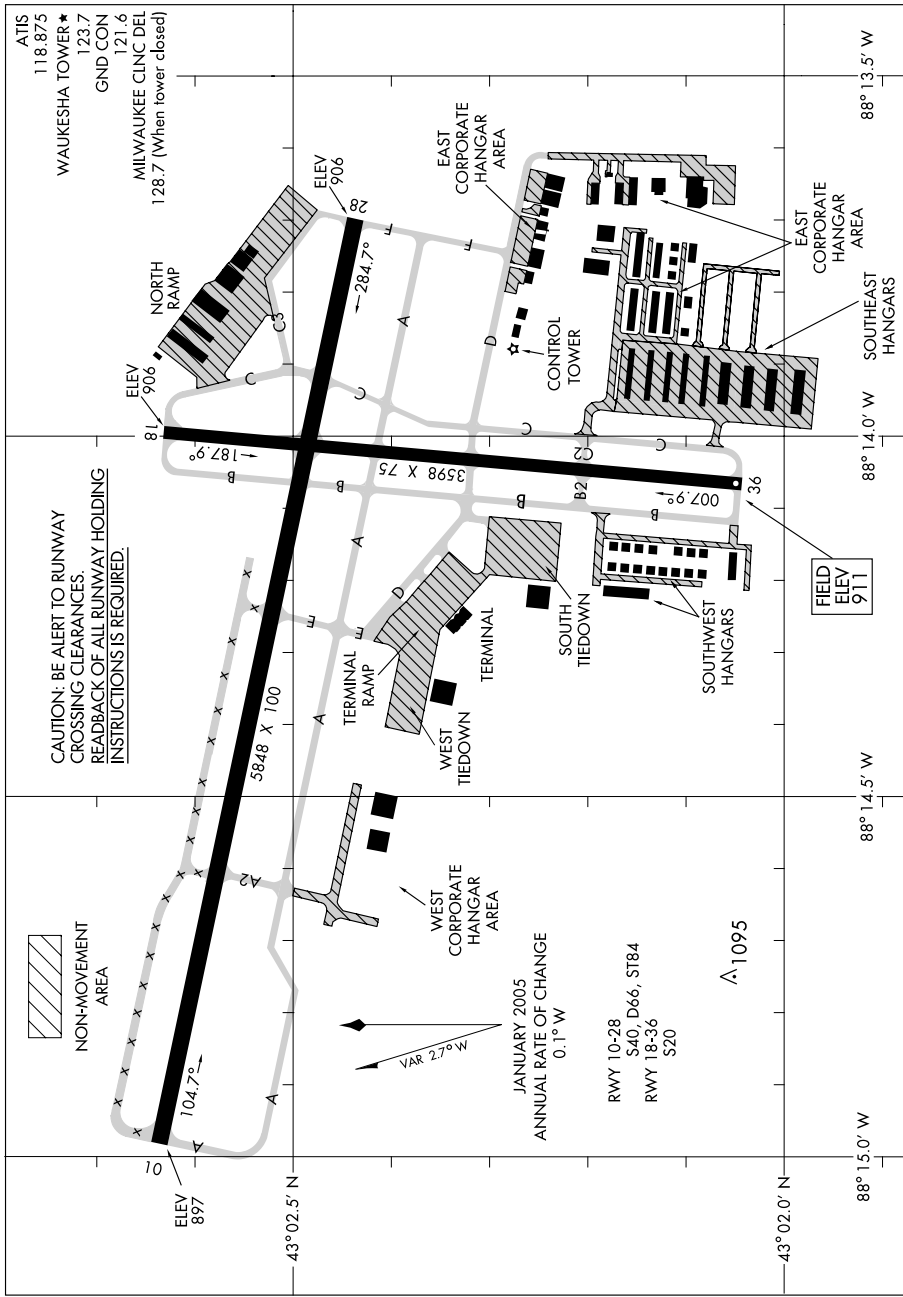
CAMP DOUGLAS, WISCONSIN  
VOLK FIELD (VOK)

09127

AIRPORT DIAGRAM

AL-5078 (FAA)

WAUKESHA COUNTY (UES)  
WAUKESHA, WISCONSIN



AIRPORT DIAGRAM

09127

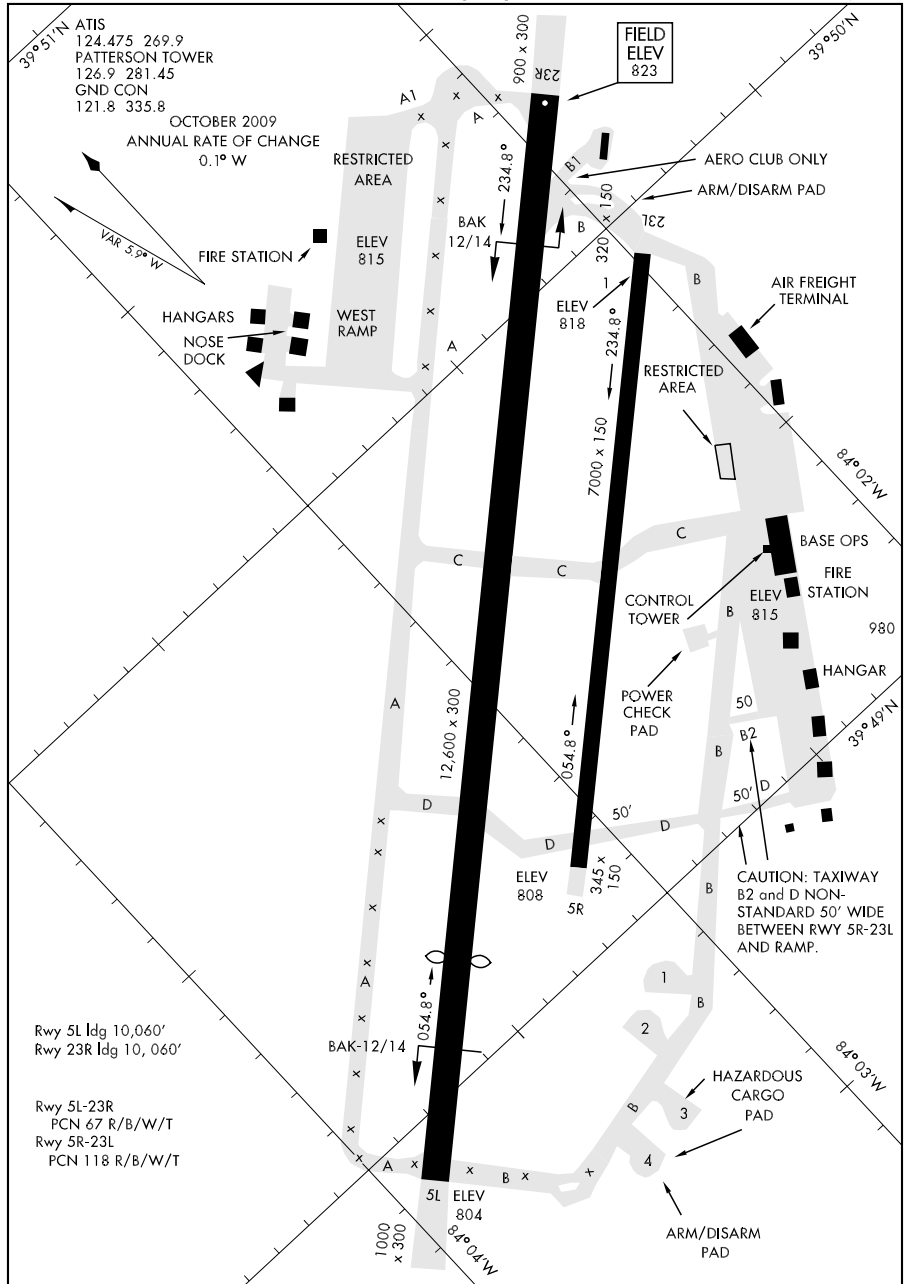
WAUKESHA, WISCONSIN  
WAUKESHA COUNTY (UES)

09295

## AIRPORT DIAGRAM

WRIGHT-PATTERSON AFB (KFFO)

DAYTON, OHIO



## AIRPORT DIAGRAM

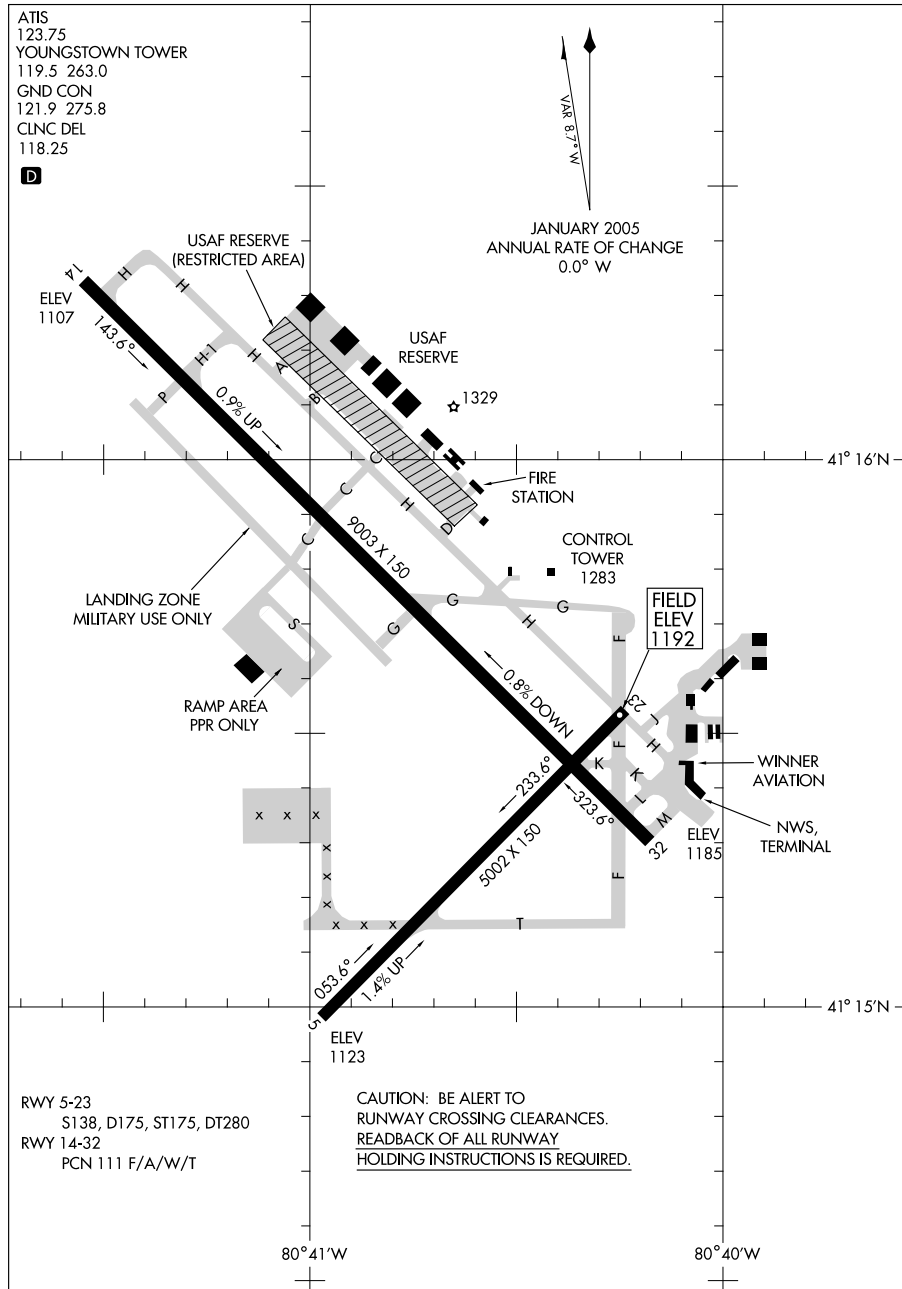
DAYTON, OHIO

WRIGHT-PATTERSON AFB (KFFO)

09295

## AIRPORT DIAGRAM

AL-466 (FAA)

YOUNGSTOWN-WARREN RGNL (YNG)  
YOUNGSTOWN-WARREN, OHIO

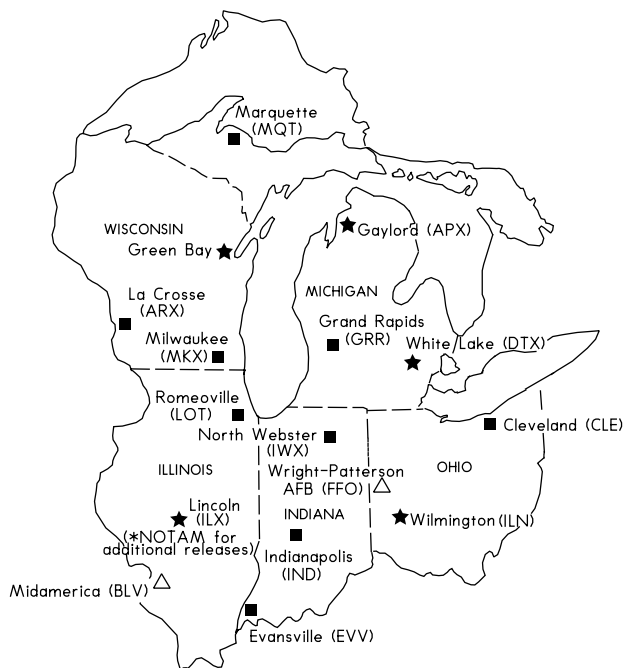
## AIRPORT DIAGRAM

09295

YOUNGSTOWN-WARREN, OHIO  
YOUNGSTOWN-WARREN RGNL (YNG)

**INTENTIONALLY  
LEFT  
BLANK**

NATIONAL WEATHER SERVICE (NWS)  
UPPER AIR OBSERVING STATION (UAOS)  
AND  
WEATHER RADAR NETWORK



LEGEND

- △ AVIATION WEATHER SERVICE (MILITARY)
- ▲ AIR TRAFFIC CONTROL RADAR
- ★ UPPER AIR OBSERVING STATION  
HYDROGEN FILLED BALLOON RELEASES AROUND  
1100 UTC AND 2300 UTC DAILY/RADAR
- RADAR ONLY
- UAOS-BALLOON RELEASES AROUND 1100 UTC  
AND 2300 UTC DAILY
- OTHER NWS UPPER AIR STATIONS-BALLOON RELEASE  
TIMES ARE FLEXIBLE BUT GENERALLY AROUND SUNRISE  
AND/OR EARLY AFTERNOON

NOTE: FOR RELEASES LATER THAN 1130 UTC AND 2330 UTC, AND  
FOR SPECIAL RELEASES AT OTHER THAN THE SCHEDULED  
HOURS, AN AERONAUTICAL INFORMATION MESSAGE OR NOTAM\*  
WILL BE FILED.